

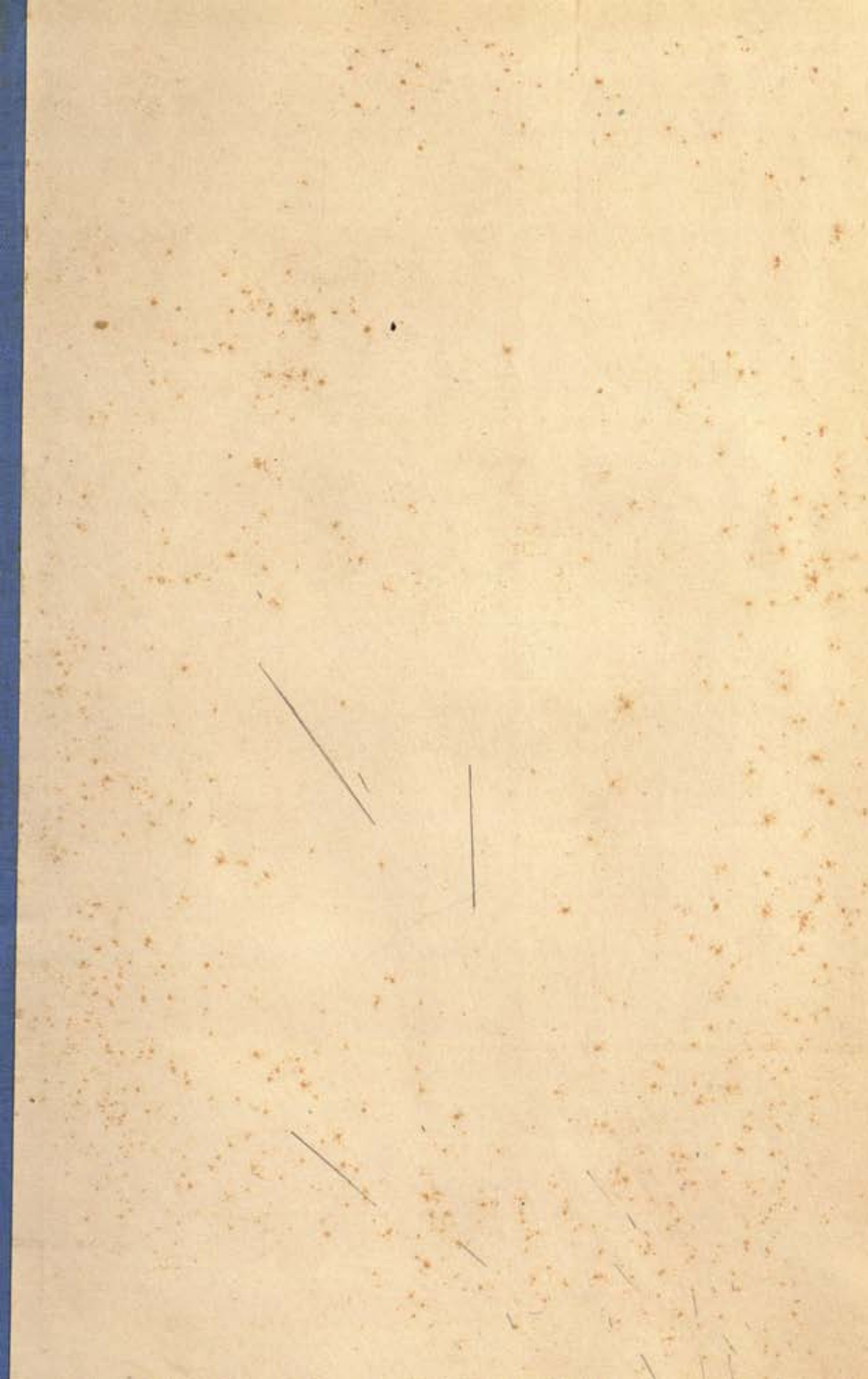
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ANCIENT EGYPT.

THE ETHIOPIAN REVIVAL.

LONG ago the Nile dweller saw the changeableness of life, the streams of one year are dry desert in the next, and the place of them is no more. The collector feels this when he enters the modern hall of judgement, an auction room, and sees the gatherings of years scattered in a day. For a couple of generations past there lay in quiet repose, near Lincoln, the charming things which Mr. Frankland Hood had collected at Thebes; they were but little known, yet have borne fruit in the training of his grand-daughter, Mrs. Crowfoot, to the interests of Egypt. Now they have passed into many different hands from the sale room.

The Hood papyrus of the list of dignities is already a classic, and the great Fayum papyrus is also celebrated. The most important piece, historically, was the panel of an obscure king in the Delta, of which a photograph is given here; for this we must thank Mrs. Hood, and the kind attention of Major Warre. The only monument of this king yet published was a granite base of a statue, or shrine, dedicated by him at Tell el Yehudiyeh, which Prof. Naville identified with the name of Aput, who was subdued by Paonkhy in the XXVth dynasty. A few scarabs may also belong to him.

The slab here shown of User-maot-Ra, Amen mery, sã Bast, Uapet, is remarkable as an unusually large piece of flat faience, originally green according to traces of colour remaining. It is a foot high, and a slab of the same size has a figure of Horus on the lotus. Evidently both formed part of some large glazed naos or chest, which had been broken in fragments. After discovery, the pieces seem to have been ground down on the back till thin, and then mounted on slabs of slate.

The art of this piece is remarkable. By the time of the XXIIIrd dynasty Egypt was sunk in great degradation. The royal monuments are worse than at any other period; the small objects, such as scarabs, are barbarous. Here, however, is a vigorous work worthy of almost the best periods. The head is excellent, and has a strong resemblance to Taharqa; this raises the question of the influence of the Ethiopians. That they brought back a fine style of art to Egypt is obvious, as their works show, before the Saite supremacy; what is usually called the Saite revival was really Ethiopian. Was this head, then, only due to copying the Ethiopian sovereign, or was the kinglet a scion of the South? His name is from the XXIIInd dynasty, but he might be half a southerner, the son of a

Delta heiress and of Paonkhy when he first occupied Egypt. The neck is unusually thick, like that of Taharqa, going ten and a half times in the height; in other figures of the IIIrd to XIXth dynasties the height is thirteen to seventeen times the thickness of neck. The shoulder knot and form of dress are closely like that of the Ist dynasty; also the square row of flaps in front, over the diagonally ribbed loin cloth. The belt has stars on it, that of Normer has diagonal squares, but the idea of ornament remains, different from other ages. The resemblance of dress is so close that it seems as if some sculptures of the archaic time were known and studied as Ethiopian models, for this is quite unlike the usual work of the New Kingdom. The late influence is seen in the thin hieroglyphs, too slight for the massive cartouche, and the thin form of the *onkh* in the right hand.

As the earliest example of the Ethiopian revival of art, this piece deserves a permanent place in works on the subject, and it is therefore issued here for reference, as the destination of it is now unknown.

FLINDERS PETRIE.

"L'AMOUR du passé est inné chez l'homme. Le passé émeut à l'envie le petit enfant et l'aïeule; il n'en faut pour preuve que les contes de ma mère l'Oie, les fables du temps que les bêtes parlaient. Et si l'on cherche pourquoi toutes les imaginations humaines, fraîches ou flétries, tristes ou joyeuses, se tournent vers le passé, curieuses d'y pénétrer, on trouvera sans doute que le passé c'est notre seule promenade et le seul lieu où nous puissions échapper à nos ennuis quotidiens, à nos misères, à nous-mêmes. Le présent est aride et trouble, l'avenir est caché. Toute la richesse, toute la splendeur, toute la grâce du monde est dans le passé. Et cela les enfants le savent aussi bien que les vieillards."

(*La Vie en Fleur*, ANATOLE FRANCE.)

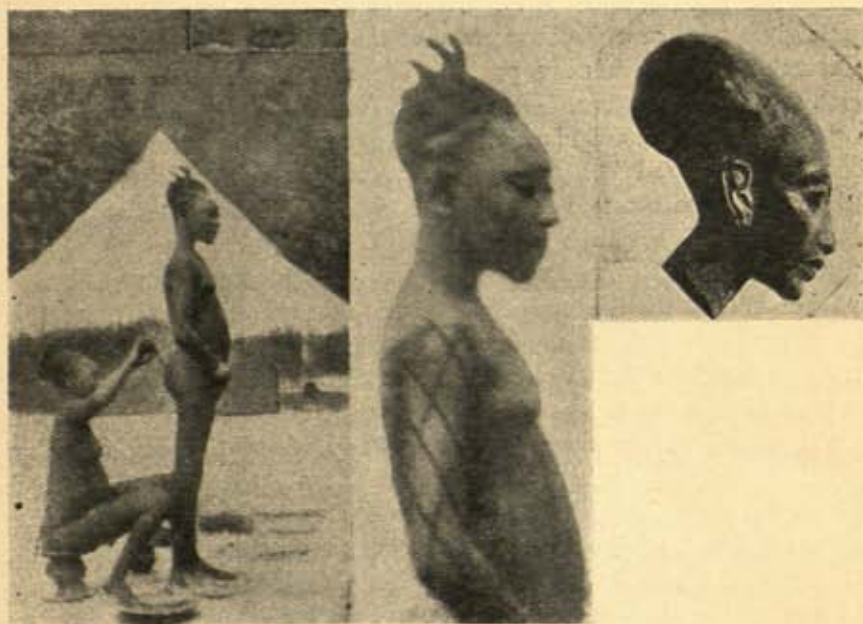
DEFORMATION OF THE HEAD.

THE head of the Mangbettu maiden shown in Fig. 1 (taken from Mecklenburg's *The Congo, the Niger and the Nile*) is artificially elongated, and resembles that of the daughter of Akhenaton (Fig. 2) in the Cairo Museum, in several points.

The back of the skull is of the same shape in both, there is the same updrawing of the brows with resultant extension of the eyelids, and both have the pendulous chin.

The Berlin head shows some of these characters even more markedly, but a profile photograph was not available for reproduction.

As to how far these characteristics are the natural result of pathological or congenital cranial elongation, it would be interesting to obtain expert opinion.



1.—MANGBETTU MAIDEN.

2.—AKHENATEN'S
DAUGHTER.

A comparison of these photographs lends support to the theory that the characteristic head elongation of the Akhenaton family was artificial, and was not congenital, at any rate in the daughters.

The practice is stated still to persist in Syria, and it can hardly be doubted that the curious flat-headedness of the Hittites was artificially produced.

The Mangbettu, now a scattered people in the Welle district, are described by Schweinfurth, who visited them in 1873, shortly before their remarkable civilization was destroyed by the Arabs, as of negroid stock with coppery red flesh tint. Their language differs fundamentally from that of their neighbours, and its origin and affinities are not yet known. The ruling element is markedly less negroid than the lower types. The heads of boys are not deformed.

E. S. THOMAS.

A DUPLICATE TEXT OF HOREMHEB'S CORONATION INSCRIPTION.

SIR FLINDERS PETRIE published in *Memphis I* (1909), pl. vi, an inscription on a portion of a stela which had been found lying in front of the pylon of the temple of Ptah at Memphis. It consists of the beginnings of twelve horizontal lines of hieroglyphs. How many lines preceded the present line 1 we have no means of judging, but it is probable that rather more than half of the stela is missing from the left-hand side of the monument. Line 12, had it been wholly preserved, would have completed the inscription. The monument itself is referred to in line 9, where it is said that the stela was carved out of sandstone and placed in front of a temple by a king "as his monument to his father Ptah-res-inb-ef." The king's name is lost and the stela has been attributed by its style to the period of Amenhotep III (*Memphis I*, p. 7). It is, in reality, a generation later, for the inscription gives part of a duplicate text of the famous Coronation Inscription of King Horemheb.¹ The missing part at the beginning must have referred to Horemheb's arrival at Thebes. Then the god Amon (line 2), "with his divine cycle following him," came out of his temple at Luxor to receive the prince. "When the second day dawned" Amon received Horemheb in audience and declared (line 3) him to be the son and heir of his body. The other gods of the cycle also recognised (line 4) Horemheb as the son of Amon, and assembling in solemn conclave they decided to bestow the kingdom of Egypt upon him. Line 5 begins the duplicate text of the Coronation Inscription on the Turin statue of the King. "He proceeded to the palace and Amon brought him before him to the Great House of his revered daughter the goddess Weret-hekau."² The Turin copy supplies the missing part of line 5. ["She did obeisance to him, she embraced his beauty, and placed herself before him. The gods, the lords of the Fire-Chamber, were in exultation because of his coronation . . . all the ennead of gods who preside over the great throne lifted praises to the height of heaven, rejoicing at the satisfaction of] Amon; behold Amon hath come, his son before him, to the palace, to set his crown upon his head, to lengthen his life" Precisely what followed now on the Memphis Stela is not certain, but line 7 gives a fragment of a speech of the gods in praise of the prince which is not found on the Turin statue. "He does that which satisfies thee, he has turned his back on evil, he has driven out deceit from the land."³ His laws are firm." The text then probably referred to Amon and the prince retiring to the palace where ["he embraced his beauty"] crowned with the royal helmet in order to assign to him the circuit of the Aton and all lands in one place. Let (now) the great name of this good god and his titulary be made like [that of the majesty of Re, as follows:—]. Here must have been given the complete titulary of the king as in the Turin Coronation Inscription. The last three lines of the Memphis document relate to Horemheb's building activities.

PERCY E. NEWBERRY.





¹ Dr. Walker, who printed a tentative translation of the inscription, does not appear to have noticed this.






² This corroborates Sethe's restoration given in *A.Z.*, XLIV, p. 35.

³ This may perhaps refer to the Aton heresy.


THE GOD SETEKH IN THE PYRAMID TEXTS.

THE god Setekh, in spite of his prominence in the Osirian myths, is a deity about whom comparatively little is known, for the later religious texts, which are by far the most numerous and the most studied, while they lay stress on his malevolent activities in the Osirian and the Horus myths, shed but little light on his origin and history. The Pyramid Texts, on the other hand, which give us a good deal of information about him, are of primary importance, as they show the oldest beliefs concerning this god which have come down to us.




The correct name of this deity is *Štḥ* (in the Pyramid Texts written *Stḥ*), and was probably pronounced with a long vowel in the first syllable (*Sēteh* or similarly). In the pyramid of Wenis the name is always written with the word-sign of the Setekh animal  (the full writing   once only Pyr. § 84a=W 128), but in the other pyramids it is invariably written phonetically , the figure of the animal being omitted, possibly lest it should exercise a malign influence over the dead king. The meaning of the name is not known, and the species of animal which typifies Setekh has not been satisfactorily determined; creatures as dissimilar as the donkey, the pig, the fennec, and the okapi having been suggested. The long sharp muzzle, the upright ears, the general shape of the body, and the dog-like couchant attitude, with the paws stretched out straight in front, in which the animal is generally represented, suggest some kind of canine, for the graminivorous animals, such as the donkey, lie with their forelegs tucked under them, while the Setekh-animal does not look in the least like a pig. The greatest obstacles to satisfactory identification are the ears and tail, which belong to no animal known to science, for the former are square-ended, while the latter is always represented as ending in either a V-shaped fork or the feathered end of an arrow, and is always extended stiffly in an upright direction. The curious object at the end of the tail may possibly be derived from a misunderstood representation of a tuft of hair. The earliest representations of Setekh, which appear over the Setekh-names of the kings of the IInd dynasty, depict the creature as walking in a curious stiff-legged manner, but in the Pyramid Texts it is always shown in a couchant attitude.

The Pyramid Texts represent the worship of Setekh as centred in the town of Ombos, in Upper Egypt: "Thou (the deceased) providest thyself with the magician, even Setekh, who is in Ombos, Lord of the South Land" (§ 204; cf. also § 205);¹ "This Wenis washes himself, Re appears, the Great Ennead shines, He of Ombos (determined with the Setekh-animal) is high in front of the shrine"; "The strength of Merenre is the strength of Setekh of Ombos" (§ 1145); "may the name of Setekh of Ombos flourish" (§ 1667). The only other place associated with Setekh is a town called    or   (§§ 734, 1904), where Setekh is described as "He who is in Henti." The situation of this place is not known.

¹ The "speech" and paragraph numbers cited as references are those of Sethe's edition of the Pyramid Texts. Whether Nubt (Ombos) refers to the city south of Silsileh, or that opposite Denderah, is not certain.

Of the actual attributes of Setekh as a god, even the Pyramid Texts do not tell us much, but it is clear that he was to some extent the embodiment of the destructive powers of nature. In one passage we find him connected with the injurious rays of the sun, for it is written of Osiris: "Thou art set up, O Osiris, thy umbrella¹ which repels the power of Setekh is over thee, O Osiris" (§ 1487); while he seems also to be connected with destructive floods: "The odour of the Eye of Horus is on this Wenis, it drives out thy (*sic*) moisture, it protects thee from the flood of the hand of Setekh (§ 20), and further the word  "storm" is determined with the Setekh-animal (§ 298b=W 437). He is associated with metal in the passage "Horus has opened the mouth of this Nefer-ka-re with that wherewith he opened the mouth of his father, with that wherewith he opened the mouth of Osiris, with the metal which came forth from Setekh, with the instruments of metal which opened the mouth of the gods" (§§ 13-14). It is possible that he may be in some way connected with the moon: "O Osiris Nefer-ka-re, receive the finger of Setekh, which causes the white Eye of Horus to see. O Osiris Nefer-ka-re, receive the white Eye of Horus, which shines on the finger of Setekh" (§ 48). He is certainly connected with the power of reproduction, for the generative organs of Setekh are the counterpart of the Eye of Horus (*cf.* §§ 418 (T), 594, 679, 1463). In § 418 the Wenis (Unas) text has the variant "the Bull," typical of reproductive power, instead of the name of Setekh. He is even conceived as winged, for in one passage "the Eye of Horus has been placed upon the wing of his brother Setekh" (§ 1742). Finally, in two passages Setekh is mentioned in conjunction with the uraeus serpent: "Pepy is the uraeus which came forth from Setekh, which he took and carried away" (§ 1459); "Horus is this which came forth from the Nile, the Long-horned Bull is this which came forth from the fortress, the Viper is this which came forth from Re, the Uraeus is this which came forth from Setekh" (§ 2047).

In searching the Pyramid Text material for the beliefs held with regard to Setekh, we find a number of distinct and contradictory ideas as to his relations both to the other gods of Egypt and to the deceased, probably representing different stages in his history. He was not always the hated divinity we are accustomed to think him, but originally ranked equally with the other gods. This is brought out quite clearly in a number of passages: "He who goes, goes with his *ka*, Horus goes with his *ka*, Setekh goes with his *ka*, Sepa (?) goes with his *ka*, Khentiyerti goes with his *ka*" (§ 17, similarly §§ 826 and 832); "Thou art purified, Horus is purified; thou art purified, Setekh is purified; thou art purified, Thoth is purified; thou art purified, Sepa (?) is purified" (§ 27, similarly § 28). In speech 217 Osiris, Isis, Thoth, Horus, Setekh, and Nephthys are called upon to proclaim the coming of Pepy II to the gods; in speech 308 we read: "Hail, O Horus in the Horite Regions! Hail, O Setekh in the Setekhite Regions! Hail, O Yarew in the Fields of Rushes! Hail, *Tly-yb*, ye daughters of the four gods who are before the Great House! The voice of Wenis is brought forth, so unveil ye! Wenis has looked at you like the looking of Horus at Isis; Wenis has looked at you like the looking of Nehebkau at Selket; Wenis has looked at you like the looking of Sebek at Neith; Wenis has looked at you like the

¹ The word here translated as "umbrella" is , which is clearly closely connected with  "shade," "shadow." The sign  apparently represents a kind of sunshade.

looking of Setekh at the *Tty-yb* " (§§ 488-489) ; in speech 534 Setekh occurs with Horus, Osiris, Khenti, Isis, Nephthys, Em-khenti-yerti and Thoth ; in speech 575 with Horus, Geb, the Souls of Heliopolis and the Souls of Pe ; in speech 591 with Horus, Thoth, and Sepa (?). Setekh is also a member of the Great Ennead of Heliopolis, as in speech 577 and 600 ; but, on the other hand, the Ennead is sometimes hostile to him, for in speech 219 his place in the Ennead is taken by Horus son of Isis, and Setekh is addressed thus : " O Setekh, this is thy brother Osiris, whose restoration is caused, that he may live and punish thee " (§ 173), while in speech 593 the deceased king is informed that " The Nine Gods protect thee, they have placed Setekh under thee " (§1628).

The greatest interest in the Pyramid Texts with regard to Setekh lies in his relations with Horus and Osiris. The relations of Setekh and Horus may be divided into three headings : (1) they stand over against each other as counterparts representing the two divisions of the country, without suggestion of either friendliness or hostility : " Thou (Tayt = the Eye of Horus) causest the Two Lands to bow to this Wenis like their bowings to Horus, thou causest the Two Lands to fear Wenis like their fear of Setekh " (§ 57) ; " O Seer (the deceased), thou hast seen the forms of the children of their fathers, whose language is known, the Imperishable Stars ; thou seest those who are in the Palace, who are Horus and Setekh " (§ 141) ; " Thou art begotten by Horus, thou art conceived by Setekh " (§ 211b) ; " Awake for Horus ! Arise for Setekh ! Raise thyself, thou eldest son of Geb " (§ 1710) ; " Thou journeyest around the regions of Horus, thou journeyest around the regions of Setekh " (§ 135). The " regions of Horus " and the " regions of Setekh " are mentioned together no less than fourteen times in the Pyramid Texts. (2) Horus and Setekh co-operate for the benefit of the deceased : " Wenis stands upon this ladder which his father Re has made for him ; Horus and Setekh take hold of the hands of Wenis and take him to the Dewat " (§ 390) ; " Thou art indeed a god, whose places are pure, who camest forth from the pure place ; ' Arise, O Wenis,' says Horus ; ' Sit down, O Wenis,' says Setekh " (§ 473) ; " The right side of Tety is that on which is Horus. the left side of Tety is that on which is Setekh " (§ 601) ; " Horus has driven out the evil which was on this Tety in his four days ; Setekh has annulled that which he did against this Tety in his eight days " (§ 746) ; " Horus bears Mer-en-re, Setekh lifts him up " (§ 1148) ; " Ho Nefer-ka-re ! Horus has woven thy booth over thee, Setekh has spread out thy awnings " (§ 2100) ; and in a spell against snake-bite recited on behalf of the deceased, the serpent is addressed : " Horus has hacked thee to pieces, that thou mayest not live ; Setekh has cast thee down, that thou mayest not arise " (§ 678). (3) Setekh appears as the mortal foe of Horus, whom the latter overcomes, the texts frequently referring to the struggles which took place over the Eye of Horus : " O Wenis, receive the Eye of Horus, wrested from Setekh and saved for thee " (§ 39) ; " Ho Osiris Tety ! Horus has come, he embraces thee, he has caused Thoth to turn back the followers of Setekh, he has brought them to thee altogether ; he has driven back the heart of Setekh for thee, for thou art greater than he " (§§ 575-576) ; " Horus has come, he recognizes thee, he has smitten Setekh for thee bound, and thou art his *ka* ; Horus has driven him back for thee, and thou art greater than he " (§ 587) ; " The Eye of Horus leaps up and falls on yonder side of the Lotus-canal, that it may protect itself from Setekh " (§ 594) ; " This Pepy has sought it (the Eye of Horus) in Pe, he has found it in Heliopolis ; this Pepy has taken it from the head of Setekh in that place where they fought " (§ 1242) ; " Loosen Horus from his bonds, that he may punish the

followers of Setekh; slay them, cut out their hearts, wade in their blood" (§§ 1285-1286). There is also an allusion to the law-suit between Setekh and Horus which was adjudicated at Heliopolis by Geb: "This Pepy arises, he has taken honour in thy presence as Horus took the house of his father from his father's brother Setekh in the presence of Geb" (§ 1219). One passage curiously enough shows Horus appealing to Setekh: "O Osiris Nefer-ka-re, this is this Eye of Horus which he has begged from Setekh" (§ 65).

As the Osiris cult gained ground in Egypt, Setekh became hostile to him also, and Horus is then the son and avenger of Osiris. In the texts relating to the Horus-Setekh feud it is not always clear whether the foe of Setekh is his original enemy, the old tribal Horus, or whether he is the son of Isis, and it is not unlikely that the old tribal myth of the struggles of Horus and Setekh was transferred bodily into the Osirian legend, and that the cause of the feud was then sought in the murder of Osiris by Setekh, whereas the original cause was a rivalry for the supremacy of Egypt, which was finally settled by Geb when he acted as judge in the great law-suit which the two rivals brought before the court of the gods at Heliopolis. The account of the Osiris-Setekh legend current in the Pyramid Age, and to which the Pyramid Texts frequently allude, is, broadly speaking, in agreement with that given by Plutarch; but the details differ, there being no trace of the latter's story of Osiris being lured into a chest and cast into the Nile, which is probably a later development. According to the Pyramid Texts, the murder took place either in Nedyt or in the land of Gehesti: "Isis and Nephthys have come they have found Osiris whom his brother Setekh felled to the earth in Nedyt" (§ 1256); "Thou hast come seeking thy brother Osiris, whom his brother Setekh threw down upon his side in yonder side of the land of Gehesti" (§ 972); "He (Geb) has found him (Osiris) lying upon his side in Gehesti; O Osiris, stand up before thy father Geb; he will protect thee from Setekh" (§ 1033). Yet Osiris and Setekh are both members of the Great Heliopolitan Ennead, and in speech 577 we find the Great Ennead, including Setekh, rejoicing at "this great and mighty word which proceeded from the mouth of Thoth on behalf of Osiris" (§ 1523). This inconsistency seems to have troubled the Egyptian theologians a little, for, as already shown, the Ennead becomes hostile to Setekh, and his place in it is taken by Horus son of Isis. We even have an allusion to the trial of Setekh before the gods of Heliopolis for the murder of Osiris: "Remember, O Setekh, and put in thy heart this word which Geb spoke, this threat which the gods made against thee in the House-of-the-Prince in Heliopolis because thou didst throw down Osiris to the earth, when thou didst say, O Setekh: 'I have not done this against him,' that thou mightest have power thereby, being saved that thou mightest have power over Horus; when thou didst say, O Setekh: 'It was he who bowed me down'; when thou didst say, O Setekh: 'It was he who attacked me'" (§§ 957-959).

In a few passages we find Setekh and Thoth associated as a pair of gods. For example, it is said to the deceased: "Behold that which Setekh and Thoth did, thy two unknown brothers who lament thee" (§ 163); in speech 219, while the Two Enneads are called upon to restore Osiris (= the deceased) to life, Setekh and Thoth are each addressed thus: "This is thy brother Osiris, whose restoration is caused, that he may live and punish thee" (§§ 173, 175); while in speech 327 Horus, Setekh, and Thoth are associated in a capacity favourable to the deceased: "The porter of Horus loves Tety and brings to him his Eye; the porter of Setekh loves Tety and brings to him his generative organs; the porter of Thoth loves

Tety and brings to him his arm ; the Double Ennead has trembled on account of them " (§§ 535-536). But even Thoth is infected with the general detestation of Setekh : " Ho Osiris Tety ! Horus has come that he may embrace thee, he has caused Thoth to turn back the followers of Setekh for thee " (§ 575) ; " Pepy is purified with the purification which Horus did for his Eye ; Pepy is Thoth, who protects you, but Pepy is not Setekh, who took it (the Eye of Horus) " (§ 1233) ; " Thou art Thoth, who protects it (the Eye of Horus), thou art not Setekh, who took it " (§ 2213).

The same inconsistency appears in the relations of Setekh with the deceased. Setekh has already been shown as acting on his behalf in conjunction with the other gods, and he further appears alone as a friend of the departed Pharaoh : " Re called to thee from the *yskn* of the sky, thou ascendest to the god, and Setekh is friendly to thee " (§ 1016) (so M and N ; the P text has the variant " Horus " instead of " Seth ") ; " The arms of Pepy are those of Setekh " (§ 1309) ; " Mer-en-re has escaped his day of death as Seth escaped his day of death " (§ 1453) ; " Mer-en-re is freed (?) by Horus ; Mer-en-re is protected by Setekh " (§ 1465) ; and in speech 478 the ladder on which the Pharaoh ascends to the sky is called " the ladder of Setekh." On the other hand, however, he is frequently the enemy of the deceased, from whom he must be protected : " The odour of the Eye of Horus is on this Wenis, it drives out thy (*sic*) moisture, it protects thee from the flood of the hand of Setekh " (§ 20). " Horus has come, he recognizes thee (the deceased), he has smitten Setekh for thee bound " (§ 587) (so T, M, and N ; the P text has the variant " thy enemy ") ; " O Nut, spread thyself over thy son the Osiris Pepy, protect him from Setekh " (§ 777) ; " Horus has seized Setekh, he has placed him under thee, that he may lift thee up and tremble under thee as the earth trembles " (§ 581) ; " It is Horus who shall avenge that which Setekh did against thee " (§ 592) ; " Horus will not seat Setekh upon thy throne for ever, O Osiris Pepy. Awake for Horus, arise against Setekh, thou first-born son of Geb " (§§ 1258-1259) ; " Horus has brought Setekh to thee, he has given him to thee, and he is prostrate under thee " (§ 1632). Setekh is even forced by the gods to serve the deceased Pharaoh : " He to whom evil was done by his brother Setekh comes to us, say the Eighteen Gods, and truly we shall not permit Setekh to be free from bearing thee for ever, O King Osiris Mer-en-re " (§ 1699) ; " The Eighteen Gods have come to thee bowing, and thou governest the spirits as Min who is in his house, as Horus of Debā'et ; truly Setekh is not free from lifting up thy offerings for ever " (§ 1993).

The reversal in the character of Setekh, which changes him from one of the principal gods of the Egyptian Pantheon to an Ishmael with every hand against him, renders him almost unique among the gods, and it is highly probable that it is primarily due to political events, although the connection of Setekh with the harmful aspects of Nature no doubt assisted in the change. The legend of the feud between Setekh and Horus is much more prominent in the Pyramid Texts than that of Setekh and Osiris, and is certainly the older of the two. It is significant that only one allusion to the Setekh-Osiris story is to be found in the whole body of texts from the two earlier of the five inscribed pyramids of Saqqara, those of Wenis and Tety (*i.e.*, in § 173 = W 246-247), but that references to it become fairly frequent in the three later pyramids of Pepy I, Mer-en-re, and Pepy II, although even there the Horus legend is still the more prominent. It is perhaps more than a coincidence that the increase in the number of allusions to the Osirian legend in the Pyramid Texts is contemporary with the great spread of the worship of Osiris

which took place in the second half of the VIth dynasty, to which the tomb inscriptions of that time bear witness.

A numerical examination of the Pyramid Texts with regard to Setekh yields the remarkable result that out of 101 speeches in which he is mentioned, he can be said definitely to have an evil character in 40 only, so that it is clear that during the Old Kingdom *period* Setekh is by no means the universally hated deity which he later becomes. A subdivision of the Setekh texts under his relations with Horus, Osiris, and the deceased cannot be wholly satisfactory, owing to the contradictory nature of some of the speeches, and the readiness with which the deceased king is identified with both Horus and Osiris, which causes a good deal of overlapping, so that a given speech may come under all three headings at once. A numerical analysis of the material gives the following approximate results: of the 69 passages in which Setekh is associated with Horus, he bears a hostile character in 27; of the 20 in which Setekh and Osiris occur together, he is hostile in 9; while in the case of his relations with the deceased, out of 49 passages he is malevolent in 20. Two facts emerge as a result of this analysis: (1) that there are two distinct strata of belief concerning this god (that in which he has an evil character being the later); and (2) that in the Pyramid Texts the distribution of the two beliefs is fairly even, the balance being slightly in favour of Setekh. It is remarkable, however, that in the case of his relations with Osiris the proportion of texts which show him in an evil character is considerably higher than in the case of his association with Horus; in fact, apart from those passages in which Setekh and Osiris are associated as members of the same Ennead, the former is almost exclusively hostile, which accords with the comparatively late spread of the cult of Osiris as a god of the dead, when the evil character of Setekh was already becoming established.

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THE ROYAL OFFICIALS.

Sealers	332-356	Almoners	461-469
Secretaries	357-375	Gardening	475-484
Eyes and Ears ...	376-382	Hunting	485-486
Legates	383-393	Cooking	487-500
Orderlies.....	394-400	Stores	502-507
Messengers	401-415	Porters	508-510
Scribes	416-449	Public works ...	511-548
Inspectors	450-460	Granaries	549-570

BESIDE the Palace officials, dealt with in our last number, there were many departments immediately under the king, and often with royal designation. Most prominently there are the sealers in the higher offices, responsible to the king. This use of seals was not only for closing letters, but more essentially for marking and securing property in the absence of any locks; they also gave the power of acknowledgement in the king's name in tax receipts, superseded later by the interminable ostraka of Roman times. Pepy I tried to suppress the family hold on offices by issuing a series of large official cylinders bearing the title only (as servant of the king), but no name of the holder. The original idea of sealing is by finger prints on clay, the word for finger and seal being the same, *zebo*, sealing being literally "fingering." Thus, early in the Ist dynasty, there was a man "over the fingers" or sealings (332); in the VIth dynasty is an "intendant of sealings," *zebou*, checking over the oxen delivered, probably sealed by him (333), and an officer called *zebt*, which may mean sealing or closing (334). In Roman times an official is designated by a finger acting (335); he seems to have been the sealer for petty supplies of cookery, sweetmeats, wine and stone delivered to the house, beneath the notice of a high sealer. In the latter part of the Ist dynasty there was the royal sealer, *bati sohu* or *khetm* (336); it continued to be a high office, usually held by the vezier, till the Saite times. There was an intendant of the royal sealers (337) who had a diwan (338); also a sealer of documents of Horus (king) in his dwelling (339). Locally there was a southern sealer of all documents (340) in the IIInd dynasty, and later an intendant of the seal (*khetm*) of south and north (341). Of lower grade, a very common title is the intendant of sealing (342), who also had an administrator (343). The office was so important that there was a "door opener of the scribe of the signet" (344), a deputy of the intendant of sealers (345-6), and a deputy sealer (347). The vezier in the Vth and VIth dynasties was Intendant of the Record Office under the seal (348). In the earliest dynasties, and on to the XIIth, the seal was represented as a cylinder rolling on the clay (349), and the keeper of the seal is named in the XIIth dynasty (350, 351). The form of the sign (after 349) was, in the IIIrd dynasty, an upright cylinder with a chain of beads, changed into an outline later on (352). The diwan of the royal sealer was in the *khā* hall of columns (353); the deputy sealers had an intendant over them (354), and there was a scribe attending to the seal (355), also a guard of the intendant, one of whom left a stele (356).

The Secretaryships mostly belong to legal matters of the vezier and the judges. The title was "over the things caused to be secret," *her sesheta*, from *shetä*, "secret." It implied no more than our *secretary*, as it had to be duplicated for a confidential secretary. The royal secretaries were "Secretary of the king in the palace daily" (357), or in all his residences (358). One belonging to Sneferu is named (359), another was "of the good god" (king) (360). There was a "Secretary of all the registers of the king" (361), or of the register of the palace (362). Another was secretary of the orders of the king (363), or of the words of Horus (king) (364). This title disappears after the Middle Kingdom (except in Saite archaism), and in the XVIIIth dynasty there is the title (365) which is *her sesheta* in later usage (B.A. 279). This was similarly attached to the king, in the palace (366-7-8-9-370). As belonging to the "chamber of gold" (371), it referred to the tomb; there are engravers of the house of gold, which would not apply to the Treasury, and the secretary would hardly be needed in a jeweller's workshop. A confidential secretary is implied in (372) "in the back of affairs," a private manager. The *per nefer* is more likely to read *per oa*, the palace (373). In (374) is an unknown sign; (375) refers to the Treasury.

The king had also private agents to report to him. In the Ist dynasty, one Kasä was "eyes of the king" (376); later in the VIth, the title *am merti* seems to refer to the pilot rather than to the agent. In the New Kingdom there were many such agents, "eyes of the king in the land unto its limits" (378); "eyes of the south king, ears of the north king" (379), "all ears in control of the farms" or country houses (380), to report what went on in the estates. Such agents had scribes with them (381). For difficult matters a special enquiry agent was employed, as "true examiner of his lord" (382).

There was a large class of *uhemu* (383), who were not only reporters, or "repeaters" of news, but were also agents to repeat orders to be carried out. Thus "legate" might be the nearest expression for this office. It is most fully stated by the great vezier Pasar, who was "Legate of the king, in his image organizing" or glorifying (384). In the Middle Kingdom there was a "chief legate of the king" (385), and in the XXth dynasty legates appear (386). There were "expert legates" (387), a "legate in all lands" (388), and a "valiant one, legate of the king" (389). The chief legate was one of the regular officers of the XXIIInd dynasty (390). A very capable one was said to "wash the heart" (391) or satisfy the king. The vezier also had a legate (392), and a great scribe was attached to the office (393).

There was also a less authoritative class of messengers, the *uput*, who had simply to transmit declarations or orders, *upt*, and, as such, perhaps the name "orderly" might best be used. There was the "royal orderly, messenger to all lands" (394), or "to the land of the Kheta" (395), a "royal orderly over the sea-going ships" (396), an "orderly messenger" (397), a royal orderly to the marshal (398), an "intendant of all the orders of the king" (399). There seems to have been a mess room for the orderlies, as there was an "attendant of the dinner table of the orderly" (400).

The general messengers, *uortu*, were of two kinds, the "*uortu* of doings" (401) and the "*uortu* of making reply" (402), that is for carrying out work, or for messages. There were keepers of the *uortu* of the good god (403), of the king over all water, land and desert (404), of the council in the court (405); of the *uortu* over the feast of beholding this day of the slaughter of the Asiatics (406), a feast like that of the slaughter of the Anu, or Dingaan's day in S. Africa. A messenger was employed to report on the Nile, probably noting the shoals (407),

- 332 𐀭𐀮𐀢 I R.T.-XIX, 10 0
 333 𐀭𐀮𐀢-𐀮𐀢 VI MEIR, IV, XVI 0
 334 𐀭𐀮𐀢 VI S.M.-XXX. 𐀮𐀢𐀮𐀢
 335 𐀭𐀮𐀢 RO. B.A. 225
 336 𐀭𐀮𐀢 I R.T.-XXI, 43 𐀮𐀢𐀮𐀢
 337 𐀭𐀮𐀢 VI SIN. 16, 17
 338 𐀭𐀮𐀢 M.K. L. V, 10 𐀮𐀢𐀮𐀢
 339 𐀭𐀮𐀢 C.M.-I, VII
 340 𐀭𐀮𐀢 II R.T.-II, 164 0
 341 𐀭𐀮𐀢 XIX, B.M. 603 𐀮𐀢𐀮𐀢
 342 𐀭𐀮𐀢
 343 𐀭𐀮𐀢 M.K. C. 20085 𐀮𐀢𐀮𐀢
 344 𐀭𐀮𐀢 M.K. C. 20056 𐀮𐀢𐀮𐀢
 345 𐀭𐀮𐀢 M.K. B.M. 189 𐀮𐀢𐀮𐀢
 346 𐀭𐀮𐀢 M.K. SIN. 28 0
 347 𐀭𐀮𐀢 M.K. B.M. 144 𐀮𐀢𐀮𐀢
 348 𐀭𐀮𐀢 V S.M.-VI 𐀮𐀢𐀮𐀢
 349 𐀭𐀮𐀢 I R.T.-II, VII, 12 𐀮𐀢
 350 𐀭𐀮𐀢 B.M. VASE
 351 𐀭𐀮𐀢 M.K. C. 20080 𐀮𐀢𐀮𐀢
 352 𐀭𐀮𐀢 III P.M. 33
 353 𐀭𐀮𐀢 C. 20570 0
 354 𐀭𐀮𐀢 A.S. I, 132 𐀮𐀢𐀮𐀢
 355 𐀭𐀮𐀢 M.K. C. 20455 𐀮𐀢𐀮𐀢
 356 𐀭𐀮𐀢 M.K. C. 20441 𐀮𐀢𐀮𐀢
 357 𐀭𐀮𐀢 V, L.D. II, 65 𐀮𐀢𐀮𐀢
 358 " 𐀮𐀢𐀮𐀢 IV, L.D. II, 333 𐀮𐀢𐀮𐀢
 359 " 𐀮𐀢𐀮𐀢 III B.M. 9 𐀮𐀢𐀮𐀢
 360 " 𐀮𐀢𐀮𐀢 A.S. III, 258 𐀮𐀢𐀮𐀢
 361 " 𐀮𐀢𐀮𐀢 M.M. D37 𐀮𐀢𐀮𐀢
 362 " 𐀮𐀢𐀮𐀢 D.M. 531 𐀮𐀢𐀮𐀢
 363 " 𐀮𐀢𐀮𐀢 V, L.D. II, 45 𐀮𐀢𐀮𐀢
 364 " 𐀮𐀢𐀮𐀢 V M.M. D38 𐀮𐀢𐀮𐀢
 365 𐀭𐀮𐀢 XIX, B.T. V, 950 𐀮𐀢𐀮𐀢
 366 " 𐀮𐀢𐀮𐀢 XVIII, L.D. III, 258 𐀮𐀢𐀮𐀢
 367 " 𐀮𐀢𐀮𐀢 XXVI T.SAR. 220 𐀮𐀢𐀮𐀢
 368 " 𐀮𐀢𐀮𐀢 XIX, SIN. 302 𐀮𐀢𐀮𐀢
 369 " 𐀮𐀢𐀮𐀢 XIX B.M. 603 𐀮𐀢𐀮𐀢
 370 𐀭𐀮𐀢
 371 " XXVI REC. IX 59 𐀮𐀢𐀮𐀢
 372 " 𐀮𐀢𐀮𐀢 PTOL. BM.
 373 " 𐀮𐀢𐀮𐀢 XVIII Q. 295 𐀮𐀢𐀮𐀢
 374 " 𐀮𐀢𐀮𐀢 BER. 1305 𐀮𐀢𐀮𐀢
 375 " 𐀮𐀢𐀮𐀢 XIX B. REC. II, 74 𐀮𐀢𐀮𐀢
 376 𐀭𐀮𐀢 I R.T.-XX, 28 𐀮𐀢𐀮𐀢
 377 𐀭𐀮𐀢 VI SIN. 16, 17
 378 𐀭𐀮𐀢 W.M.C. III, 83
 379 𐀭𐀮𐀢 QUAN. 256 𐀮𐀢𐀮𐀢
 380 𐀭𐀮𐀢 W.M.C. II
 381 𐀭𐀮𐀢 A.S. XVII, 92 0
 382 𐀭𐀮𐀢 V S.M.-I, VII 𐀮𐀢𐀮𐀢
 383 𐀭𐀮𐀢 XII P.S. 86, 87 𐀮𐀢𐀮𐀢
 384 𐀭𐀮𐀢 XIX L.D. III, 132 𐀮𐀢𐀮𐀢
 385 𐀭𐀮𐀢 P. 26 𐀮𐀢𐀮𐀢
 386 𐀭𐀮𐀢 P.J. II, 3 𐀮𐀢𐀮𐀢
 387 𐀭𐀮𐀢
 388 𐀭𐀮𐀢 RO. B.A. 223 0
 389 𐀭𐀮𐀢 BER. 1389 𐀮𐀢𐀮𐀢
 390 𐀭𐀮𐀢 XXII H 0
 391 𐀭𐀮𐀢 M.K. C. 20429 𐀮𐀢𐀮𐀢
 392 𐀭𐀮𐀢 M.K. C. 20102 𐀮𐀢𐀮𐀢
 393 𐀭𐀮𐀢 T. 16 𐀮𐀢𐀮𐀢
 394 𐀭𐀮𐀢 A.S. XX, 6
 395 𐀭𐀮𐀢 XVIII REC. IX, 37 𐀮𐀢𐀮𐀢
 396 𐀭𐀮𐀢 XIX P.SED. LXIII 𐀮𐀢𐀮𐀢
 397 𐀭𐀮𐀢 RO. B.A. 222 0
 398 𐀭𐀮𐀢 XVIII SIN. 184
 399 𐀭𐀮𐀢 A.S. XIII, 134
 400 𐀭𐀮𐀢 M.K. C. 20667 𐀮𐀢𐀮𐀢
 401 𐀭𐀮𐀢 BM.
 402 𐀭𐀮𐀢 B.M.
 403 𐀭𐀮𐀢 RD. CXXXVII 0
 404 𐀭𐀮𐀢 LR. 197 𐀮𐀢𐀮𐀢
 405 𐀭𐀮𐀢 L.F. 252 𐀮𐀢𐀮𐀢
 406 𐀭𐀮𐀢 LR. 314 𐀮𐀢𐀮𐀢
 407 𐀭𐀮𐀢 XII N.Bh. I, XVI 𐀮𐀢𐀮𐀢
 408 𐀭𐀮𐀢 BER. 1379 𐀮𐀢𐀮𐀢
 409 𐀭𐀮𐀢 M.K. C. 20709 𐀮𐀢𐀮𐀢
 410 𐀭𐀮𐀢 C. L. 400 𐀮𐀢𐀮𐀢
 411 𐀭𐀮𐀢 M.K. C. 20056 𐀮𐀢𐀮𐀢

For abbreviations see last number, pp. 112, 113. Also: B.T., Brugsch, Thesaurus. C.M., Champollion, Monumens. D.A., Davies, Akhetetep. Desh(ashah). Ln., Leiden. Lv., Liverpool. M.D., Morgan, Dahshur. Meir (Blackman). Mun(ich) Glyptothek. P.D., Petrie, Denderah. Q., Qurneh Tomb. R.D., Rosellini, Mon. Divin. W.M.C., Wilkinson, Manners and Customs.

for the chief's fruit or grain (408), for the chief's table (409), and for catering for the high table of the *khā* hall of the vezier (410). There was also a scribe over the sealing of the land messengers (411). The messengers were an organized body, as there was an overseer (412), and an intendant (413).

The great noble Amthen was intendant of the tribute bearers (414), and there was an office of "the royalties of the king in the palace gate" (415).

The scribes were a large class, and from modern experience they are likely to have been influential in all the details of affairs. The most important were the royal scribes, who were not only employed about the court, but were sent to various centres of wealth, like our Treasury clerks, to supervise the interests of taxation. Side by side with the clerks of the chief at Beni Hasan there sits a "royal scribe" of accounts to note all the produce on which a share may be due to the king (416). There was a "scribe of the records before the king" (417), and an "intendant of the scribes before the king" (418). In the XXIIInd dynasty we find "royal scribes of the inventory of store houses of the palace" (419). Special work went to an "expert scribe of the office of royal documents" (420), and an "intendant of the royal scribes of documents" (421). The checkers were organized with an "intendant of the royal scribes over against one another," *obu*, to place things face to face, the *avtēpapeis* (422-3).

We find a palace scribe of the office (424), scribe of the letters of the palace (425), scribe of the letters of the queen (426) who was in some cases a woman (B.A. 204), a scribe of Pharaoh (427), an intendant of the palace scribes (428), a controller of the scribes of the king (429), and an intendant of royal scribes (430). Of private positions, there is the spelling *seš* for scribe in the IInd dynasty (431), an intendant (432) and controller of all scribes (433). The intendant of the writings (434), figured by the bag with a long neck in which they were carried (see also L.D. II, 23); the form is better than that of the modern brief bag. There were special scribes of the southern correspondence (435), of the vezier (436), of the valuation, writing the inventory of cattle (437), of the catering (438), of the servants' hall (439). Higher grades were the "expert scribe" (440), the "excellent scribe" (441), the draughtsman (442), the "overseer of scribe engravers" (443), the "expert scribe of form" (444), in sculpture or painting, the foreman of sculptors (445), also the intendant of the messengers of the scribes of sculptors (446), and another intendant of messengers belonged to the office of scribes (447). There was, it seems, a strong organization of all the technical work. The documents drawn up were officially sealed by the lieutenant of the intendant of sealing documents (448). A general practitioner was the "scribe in the *khā* halls together among multitudes" (449), a public scribe who wandered round the law courts for employment.

The Inspectors (450) *rudu*, of the New Kingdom, do not seem to have been closely attached to departments, but to have been general advisers. The name is probably a Semitic importation from רוד dominion. There were inspectors of the harem (451), of the palace (452), of the storehouse or dwelling (453), a superintendent of inspectors of his Majesty (454), an expert inspector (455), and a scribe of the inspector of stores (456). A title which might be confounded with this has *rud* as the name of a "fertile" district, that most prolific region of Saft el Henneh, "the Leader of the fertile land of the sun" (457). Earlier titles of inspection were "making sound all things" (458), and "keeper of the fine things" (459), both in the IInd dynasty. Later there is an intendant of all things of the king (460).

412	ᲙᲗᲗᲗ	B.M.	452	ᲙᲗᲗᲗᲗᲗᲗᲗᲗ	XIX B.A. 265
413	ᲙᲗᲗᲗ	M.K. C. 20081	453	ᲙᲗᲗᲗᲗᲗᲗᲗ	T. 3022
414	ᲙᲗᲗᲗᲗᲗᲗ	III L.D. II, 8	454	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗ	G.M. 967
415	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗ	XXII H.	455	ᲙᲗᲗᲗᲗᲗᲗ	A.S. XI, 86
416	ᲙᲗᲗᲗᲗᲗᲗ	XII N.Bh. I, XXX	456	ᲙᲗᲗᲗᲗᲗᲗ	
417	ᲙᲗᲗᲗᲗᲗᲗᲗᲗ	VI MEIR. IV, IV	457	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	A.S. XX, 126
418	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	XII REC. X, 144	458	ᲙᲗᲗᲗᲗᲗᲗᲗᲗ	II R.T. II, XXIII, 201
419	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	XXII H.	459	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	II R.T. II, XXII, 188
420	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	A.S. III, 72	460	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	M.K. C. 20683
421	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	V L.D. II, 45-8	461	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	M.M. C. I
422	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ		462	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	M.K. C. 20666
423	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	XXVI A.S. II, 112	463	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	M.K. C. 20725
424	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	B.G. 10	464	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	V L.D. II, 65
425	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	A.S. V, 134	465	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	M.K. C. 20631
426	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	L.R. 281	466	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	M.K. C. 20399
427	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	A.S. VIII, 65	467	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	M.K. C. 20418
428	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	S.U. II, 177	468	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	V L.D. II, 65
429	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	IV L.D. II, 41-2	469	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	M.M. D. 07
430	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	IV L.D. II, 27	470	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	I R.T. I, XXX
431	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	II R.T. II, XXII	471	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	I R.T. I, XXX
432	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	V Z.A.S. XXVIII, 48	472	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	S.U. II, 170
433	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	V D.A.	473	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	M.K. C. 20733
434	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	VI MEIR. IV, XVII	474	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	M.K. C. 20539
435	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	A.S. VII, 51	475	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	V L.D. II, 71-2
436	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	XII P.S. 177	476	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	VI M.M. E. 16
437	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	XII N.Bh. I, 46	477	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	VI L.D. II, 88C
438	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	XII " "	478	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	D.M. 548
439	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	A.S. VIII, 30	479	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	XVIII P.S. C. XXIX
440	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	VI MEIR. IV, XIV	480	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	IV L.D. II, 39A.C.
441	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ		481	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	M.K. C. 20296
442	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	M.K. C. 20075	482	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	M.K. C. 20296
443	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	B.M.	483	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	IX, S.U. II, 132
444	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	VI MEIR. IV, VIII	484	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	B.M.
445	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	M.K. C. 20039	485	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	V. M.M. E. 6
446	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	M.K. C. 20039	486	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	XVIII B.M. 471
447	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	L.R. V, 116	487	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	B.M.
448	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	M.K. C. 20085	488	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	B.M. 545
449	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	M.K. C. 20536	489	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	R. 0, B.E. 225
450	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	XXII H.	490	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	XXII, H.
451	ᲙᲗᲗᲗᲗᲗᲗᲗᲗᲗᲗ	P.J.			

The royal almoner, *henku* (461), was active in the Old Kingdom. There was a keeper of alms (462), a keeper of the house of gifts of the office of alms (463), a royal controller of alms (464), an overseer of the almonry (465), an intendant of the diwan of the almonry (466), a clerk of the almonry (467), and an expert of all the royal alms (468). A curious title (469) is "royal almoner in public works that are bare" or unfruitful (*ushr*); this means a recompense to the *corvée* when

employed on work that was not for the benefit of their own district. There is no trace of this almonry in the New Kingdom, when the old feudal partnership of society died out. The absence of any human determinative after *henku* shows that the term does not refer to a class of people, as was supposed.

The festivals will be dealt with among religious titles, but we may note the earliest mention of officials for the purpose. At the end of the Ist dynasty Sabef was "controller of the festival in the palace of Horus the monarch" (470), and "intendant of the *sed* feast" (471).

The court officials are not often named as such. One man claims to be influential in the midst of the court (472); *āu* here seems intermediate between its sense of respect and of expansion. There was an intendant of the court (473), and one was "over the silencing of the court alone for the king" (474).

The garden was a very important charge, often under the vezier; in that climate it is naturally the best place for living and working, as well as being a pleasure. There was an office of the palace garden (475), and intendants of the garden (476-7-8). The great Senmut managed the garden of Amen and Mut at Thebes (479). There were palace students in the garden (480); see *em khat* "in the following," as scholars in sculpture. Experts are named (481-2), and a controller of the vine-dressers (484). Most of these titles belong to the Old Kingdom, when gardens were often represented in tombs, and they continued throughout the history, and were an important feature in Arab and modern times among the rich, but unknown to the peasantry now.

The hunting and fowling of the king in the Old Kingdom was in charge of the "Intendant of all the diversions of the king" (485), *sekhmekh ab*, diversion, amusement. A similar title in the New Kingdom was the inspector of all the amusements (486), and of the sailors of the king (B.M. 471); *sed* here being explained by *sezi*, to amuse, and *sed* to shine, like the cry for "brighter London."

The cooks are mostly of importance in the XVIIIth dynasty, when the made dishes were ruining the royal teeth (P. *Amarna*, V). The head cook of queen Taiy appears (487-8), and a cook of *shoy* cakes, probably shortbread of a crumbly nature (489). The brazier or fire place, *okhen*, gives the name to the cooks in later time, *okhny* or *okknu* (490-1). What seems to be a figure of the cooking stove appears in the title, keeper of the office of the king's kitchen (?) (492). The intendant of the king's repast is named (493), and the clerks of the royal table (494-5), also the intendant of the food of the king (496). In the Ist dynasty the large flint knife appears as the badge of the royal carver (497). The royal waiter is said to be clean of hands in the IXth dynasty (Qau) and the XVIIIth (498). The royal servants are named *hem* (499) and *bak* (500): the *hem* was a bond-servant (as to a god), or a slave, while the *bak* was a voluntary servant, as a chief's wife was servant of a king.

The storehouses were usually long tunnels of brick side by side, as at the Ramesseum; they are figured as under a controller (502) or intendant (503). That this sign does not mean a temple is shown by the "controller of the stores of the inundation" (506), where the beams, ropes, and tools were kept ready to repair the dykes. Also in (505) there are named the storehouses of the temple, which clearly separates the meanings.

Porters, *thā*, are sometimes named as the "bearer of the writing tablet, *on*, before the king," (508, and the scribe of the porters (509); also the bearer of the bow, already quoted (214). There was a warden of the porters, *qeru*, of the temple of Sety I (510).

491		Ro. B.F. 224	o	531			
492		M.K.C. 20418	o	532		L.R. T.IV	(o)
493		M.K.C. 20683	4	533		MUN. 24	
494		XVIII L.R. 283	4	534		V.M.M. D9	u
495		T. 2752	o	535		M.M. C1	o
496		XXII H.	o	536		L.N. 97	o
497		I. R.T.I, XXXI, 24	o	537		XI L.D. II. 149 C.E	o
498		G.W.T. 92	4	538		M.K. C. 20297	o
499		see 331 XVIII L. 598	o	539			
500		C	o	540		VI. L.D. II. 115 G	o
501		A.S. XIX. 67		541		M.K. C. 20081	o
502		XXVI L.D. III. 159	o	542		XIX. B.M. L. 1354	o
503		A.S. VII. 131	o	543		B.M.	
504		XVIII L.R. 203	o	544		P.S.C. XIV	o
505		A.S. II. 234	o	545		B.A. 228	o
506		VI. S.U. I. 87	o	546		C. L. 542	o
507		VI. L.D. II. 126	o	547		XXII H	
508		M.K. C. 20455		548		III S.M. I.	o
509				549		I R.T.I, XXIII. 41	o
510		P. C. 93	o	550		V L.D. II. 45-8	o
511		V DESH. VI	o	551		T. 1550	o
512		IV C	o	552		XXII H	
513		III R.M. 20	o	553		IV M.M. B. 10	o
514		XVIII A.S. IV. 209	o	554		VI D.G. I. III. XVII	o
515		NAPLES		555		V D.P. II. 20	o
516		XIX. T. 1618	o	556		B.M.	
517		VI C. (L. 35)	o	557		M.M. D. 30	o
518				558		P.G. VIIA	o
519		XVIII ZA. S. XXI. 127	o	559		M.K. C. 20694	o
520		XXII. H.	o	560		M.K. C. 20742	o
521		III B.T. 1235-8	o	561		" "	o
522		B.M. 476	o	562		XVIII L.R. 173	o
523		XVIII B.M. 378	o	563		B.M.	
524		B.M.		564		B.M.	
525		concl. 84 P.S.	o	565		B.M.	
526		XX. B.T. 1129	o	566		M.K. C. 20054	o
527		XIX M.A.B. II. 56	o	567		A.S. XVII. 92	o
528		" "	o	568		XII. B.M. 168	o
529		XVIII. N.R.	o	569		G.W.T. 82	o
530		A.S. X. 108	o	570		R.C. XXXIV.	

The public works were a large department, as we see by the profusion of temples remaining, and were especially under the king's control. The initiative was royal, as in the descriptions of Aohmes planning the memorial of Teta-shera, and Hatshepsut planning the obelisks. Sety I also planned the works on the desert road to the mines. There was an intendant of the royal monuments (511),

and frequently the temples are described as monuments ordered by the king, also a royal intendant of all works (512-3); an extensive claim is by the "intendant of all works of the king in woods, fields, deserts, among the farmers, and in the Delta marshes" (514). The works are named "among the monuments of his majesty Horus" (515), in the palace (516), and in the Turra quarries (518); the great monuments are named (519) and the "maker of glorious works of the king" (520). Locally there was the management of works in the south and north (521), the works at Erment (522), at Abydos (523), the temple of Tahutmes III (524), and that of Sety I on the west of Thebes (525); the works of the great royal tombs appear (526-7), and the inscribing of them under the "intendant of works of excellent writings in the glorious mountain" (528). Controllers and overseers were employed (529, 530-1), and Tahutmes IV is said to countenance, or "give face to," all works (512). The scribes of controllers (513), and scribes for the inscriptions (514), a secretary (515), and keeper of the workmen (516) have left their record. The brickwork is shown by the action of piling it up (538), and the stone building by applying the plummet (*Athribis* xviii) (539). The large amount of the carving and inscribing is indicated by the graver, *qed* (540). This sign cannot have been used for mere masonry, as no one could build with a graving tool or a knife; it must mean the long and tedious sculpturing of the surfaces, a more serious work than the mere constructing. There are the intendant of carvers (541), the scribe (542), the scribe of the quarry (543), the overseer of the transport sledges (544), the warden of the quarry (545), who was the leader of the provincial city, the intendant of the magazine of the intendant of works (546), the "warden of the registered workmen of his majesty" (547), and controller of registered workmen or *corvée* (548). These titles give a glimpse of the immense organizations, which made the long quarry galleries hum with labour under all the great kings, now the most desolate of places, the refuge of bats and jackals.

The care of the public food supply was a most important charge of government, with which we are familiar in the story of Joseph. In the Ist dynasty there was a seal of the granary in the fortress of Sezahetep (549), and throughout the history the storage and registering of grain was a large concern of the rulers. The intendants of granaries of the south and north were often the veziers (550-1-2); the granaries of the king (553), the controller (554), deputy head of the granary (555), the administrator of the granaries of the king (556), the scribe (557), and the royal sealer of the granaries (558), have all left their memorials. We find a gatekeeper of the granary of a temple (559), an intendant of the domain of the granary (560), an office of a granary (561), and a "granary for the satisfying of the body" (562). The stages of transport are mentioned, as the round bottomed crate in which the ears were carried (563), see *P. Arts and Crafts*, Fig. 71; the store chamber where the ears were piled before threshing (564-5); the diwan of the measuring of corn (566); the overseer of measuring (*khāy*) (567); the office of accounts of corn (568); and the scribes of accounts and of division of corn between the landlord and cultivator (569-70).

These details of the way of managing the country, though trivial in themselves, yet give a living impression of the precision of management and subdivision of labour, on which that great and permanent civilisation was based. I much hope that corrections and additions to these lists will be forwarded to me, in order to form a more complete gazetteer of the system of Egyptian life.

FLINDERS PETRIE.

REVIEWS.

Atlas zur altaegyptischen Kulturgeschichte. By WALTER WRESZINSKI, Teil II ;
Lieferung I. 10 pls. (Hinrichs, 1924.)

Prof. Wreszinski begins a new campaign with the first sheets of the second part of his Atlas, and, profiting by experience, is evidently going to render us even better service than before, not only by the much larger scale of photographs, but also by leaving the tombs of Thebes for more inaccessible sites, and by gathering in the over-ripe harvest of the temples. The enlarged or unreduced photographs involve a very inconvenient *format*. Under the circumstances this may be forgiven, but triply-folded plates should be absolutely banned. Publication by photographs alone is rarely satisfactory, but, when they are on an adequate scale like this, one has to reconsider one's judgments ; for, where the wall is fairly well preserved, one cannot only dispense with line-drawings, but even control them, as is proved by the sheets here laid before us. The present issue comprises excerpts from Beni Hasan, El Amarna, Medinet Habu, and Karnak. I gather that the author hopes to include 175 sheets in the full work, and to complete it in little more than a year. It is to be hoped that in his selection Prof. Wreszinski will give unpublished or unfamiliar scenes the preference.

A reviewer, however, has the duty of looking gift horses in the mouth. If there is nothing but praise for the photographs, the same can scarcely be said for the line-plates, which, being evidently drawn from the prints by an unpractised hand without further aid, invite the famous condemnation of the books of the Alexandrian library as either useless repetitions or in manifest conflict with truth. It is inexplicable why in cases where, as with sheets 6, 11, 12 and 14, careful tracings or copies from the originals have already been published, these should have been made no use of, and even contravened. Unless very exact, line-drawings which do not gather in the minute evidences of colour and relief detract from, instead of adding to, the value of photographs of this quality. For the rapid reader will naturally assume that they have drawn upon added knowledge, and will usually consult them in preference, not noticing that they are full of error and ignoble contours. But as the Atlas itself provides the means of criticism and correction, this warning may suffice. The detailed description of the plates, though excellent, is not quite beyond cavil, and much of it might be replaced by cited parallels and variants. Sheet 14 may be taken as an instance. Read there "Plate 43" for "33." Semites do not wear feathers or carry the axe ; the third man is therefore a Libyan, as his hair shows. The puzzling object in the hand of the Egyptians may be a sack, as recruits (or members of the commissariat) carry these (*Theban Tombs Series*, III, pls. 24, 25 ; *Mission Française*, V, p. 229). Or it may be the object which is elsewhere seen hung on a staff as a standard (*El Amarna* I, pls. 26, 29 ; III, pl. 31, and, more clearly, in Tombs 56 and 93 at Thebes). It may therefore actually be a sandbag or a swinging club used as a weapon.

N. DE G. DAVIES.

Lieferung 2.

This contains eleven more plates of these splendid reproductions, giving for the first time efficient renderings of some subjects which have never been accurately copied, and for the scenes at Beni Hasan—and elsewhere—a control over all the previous copies. We are none of us infallible, not even the most accurate, as the photographs witness. A work like this ought to have been done by the Egyptian Government long ago, but the national effort ended in Vol. 1 full of deficiencies, and now it seems that Egypt cannot even build a storehouse for a treasure when it comes to them for nothing.

F. P.

Antiques, their Restoration and Preservation. By A. LUCAS. Sm. 8vo. 136 pp. 1924. 6s. (Edwin Arnold.)

This handbook gives the practical experience of a professional chemist, and is therefore a competent and safe guide to all who have not such qualifications for the delicate and complex questions involved. It ought to be the primary reference at hand in every museum. The influence of the conservation at Tutankhamen's tomb is evident, and the opening chapter called "Restoration," would be better termed "First Aid," dealing with the means of immediate safety before transport, while the next chapter concerns the ultimate condition in museums. The various materials involved, and the methods proper to each of them, occupy most of the book. A few pages at the end give some of the elementary chemistry which should be the basis of every curator's training.

There are, however, various lines of experience; and, in view of the certain future of this book as a standard of reference, it may be well to give some results of other experiences which may supplement this work.

P. 12. Where breaks are fresh, as on pottery or faience, the joining should be done before cleaning, in order to save the edges.

15. In making joins of fragments it is often well to use rubber bands, with crushed paper wedges on the convex side under the band, so that the band makes equal angles on each side of the outer edges.

16. Celluloid cement is readily made from disused photograph films (washed clean), and it can be employed of any stiffness up to firm jelly, usually as thick as stiff treacle.

20. Paraffin wax has been much extended in use during the last twenty years, in the form of paraffin butter. Pour the wax, barely melted, into an equal volume of benzol, and shake up; the white butter will melt with the finger warmth, and can be spread as thickly as required. After the benzol has evaporated, a slight warmth will fuse the film of paraffin into the substance. On wood the amount of wax is thus enough to fill the fibres, without choking the pores and darkening the face; a light brushing will polish it, and leave a waterproof coat. On other material it is also very desirable to apply a thin wax coat, as on the wax panel portraits when in fair condition. Thicker amounts can also be added more safely in this way than by flooding with melted wax. Any excess of melted paraffin is best removed at once by rag, and not by scraping when solidified.

25. In museums the protection from light is best assured by fall-down flaps of dark stuff, which must be held up during inspection.

27. Show cases can only be made dust proof by free ventilation through cotton wool filters.

34. Polished alabaster may only be wiped with damp cloth; water spoils the polish of calcite, though not so readily as that of gypsum.

39. For reed or basket work, hot rice water or tapioca is an excellent stiffener, not darkening the colour.

47. It is not well to use vaseline in any position where it can attract dust. Paraffin wax, being hard, is the best coating, laid thin, as in paraffin butter.

56. Much may be done with ivory if tightly bound with cotton thread; after soaking in water, it can be dried and paraffined. The safest treatment for all salt ivory is to make a very stiff jelly, lay the ivory in when barely melted, let it cool, and thus remain for several weeks for the salt to dialyse out. Bones can be treated similarly in tanks of size. If there is crystalline calcite deposited on the ivory, then paraffin the whole, clean the calcite with benzol, and dissolve it with nitric acid, which will barely touch the paraffined ivory.

61. Paraffin bedding would be best for fragile enamels.

63. Gold should be cleaned with camel-hair brush and plain water, and never rubbed or stiff brushed. It should be left to look old, and not like modern jewellery. Incrustations may be crushed and dislodged, rather than affect the whole surface by solvents; such are only needed when there are exuded silver or copper compounds.

66. Gilt gesso or cartonnage is best fixed by paraffin wax; it may be cleaned with a tuft of cotton while the wax is melted.

72. Thick incrustation of chloride of silver on coins was removed by Ready very simply, "I 'eats 'em red 'ot"; as chloride melts at only a quarter of the heat of melted silver, the process seems safe.

78. If hydrochloric acid is used for stripping copper, the white oxychloride is best removed by hot hyposulphite of soda.

82. The magnesium powder in glycerine jelly, used by Rosenberg, seems an ideal way to remove chlorine from a metal, especially suitable for small patches. There is no finer face to be had on copper than that left after flaking; any nearly pure copper will bear blows from a light hammer, which crack away all the exuded crust, and leave the old face with original polish intact, although spongy inside. A wire brush should never be used anywhere within reach of a metal face.

86. If iron is not deeply rusted there is no cleaner method than vapour of strong cold nitric acid. The rust loosens, and should be brushed off daily under a tap of water, drying the iron rapidly on a gas ring before replacing over the acid. At last the metal looks like aluminium, and should be very rapidly heated and paraffined. The actual wasting of the metal in this way when bared is only 1/5,000th inch daily.

96. Panel portraits painted with wax are found in every state of disorder. Varying thicknesses of paraffin butter can be laid on and melted in, with very little risk of damage if the heating is rapidly used.

100. If pottery is cleaned with acid it should be thoroughly saturated with water before, and the acid soon washed off, and repeated if needed, so as to prevent its entering the body.

101. Ink inscriptions on pottery or stone may be flushed over with a splash of hot paraffin, so as not to enter the pores, but only to glaze the surface. Some ostraka will bear soaking and scrubbing without losing the ink.

104. The all-important removal of salt from stone should never be done by the Berlin soaking in a tank, which destroys the surface without cleaning the interior. The only right way is to bed the worked face on wet sand, and let the

moisture in the stone evaporate on the plain back, carrying out the salt with it. A crop of salt crystals can be scraped away every day until the stone is cleansed. Another method, less complete, but very useful before packing, is to wet the stone, and plaster an inch of wet sand all over the face, pressed tightly on. In a few days this dries, and all the salt is in the sand and goes when that is cracked off. A stone which had crystals of salt on the face was so cleaned by a sand coat that no trace of salt could be tasted on it afterwards.

110. The organic filth in textiles is best extracted by balling the tender pieces inside the stronger, and then soaking and squeezing the water out of the mass. If this is done every minute for about half an hour, the effluent is fairly clear; on opening out the lump each piece can be delicately picked loose and laid in a stack of newspapers to dry.

119. No special form of balance is needed for taking the specific gravity of small objects. Put a glass of water in the scale pan and balance it, then hang the object in the water by a fine wire held in the hand, without touching the glass; the increase of weight in the pan is that of an equal volume of water.

Manuel d'Archéologie égyptienne. Les éléments de l'architecture. Par G. JÉQUIER. 8vo. 401 pp. 250 frs. (Paris, Picard.) 1924. 30 frs.

This work deals mainly with the artistic view of architecture in each of its elements, and the principal feature is the exhaustive series of some forty capitals from the decorative combinations of the Ptolemaic and Roman temples. The arrangement is clear and complete, dealing with the materials, the foundations and floors, the walling, doorways, windows, stairs, pillars, columns of all types, roofing, and the kernel of the whole in the shrines, altars and statues, beside an account of obelisks. We may wish that any English publisher would produce such a volume at the price. All this, as in the title, deals with the "elements," without much notice of the combination, either in plans, or as to strength, or regarding the effect of the whole. As a general text book of various parts of a stone building it is excellent for students. We might wish that the panelled brickwork was traced to the actual wooden houses of the same design, of which the various pieces remain to us, and are modelled in the proto-dynastic wooden sarcophagi. The open sky lighting in the hypostyle halls, seen in the Ramesseum, might also be noted, as such halls would otherwise be gloomy. We hope that Prof. Jéquier will find opportunity to study brickwork more closely. He often refers to mud walls, *pisé* or *pilonné*, yet among hundreds of walls very carefully examined for the sizes of bricks, not a single piled wall has ever been found; had they existed they would have survived as well as the brick walls, or better, as there would be no temptation to use them later for material. Then the difference between vertical and battered walls is not one of material, but entirely that the batter is the outer face, the vertical face is the inner. The sizes of bricks are of great value historically, as they steadily degrade over several centuries, until a fresh start is made; it is useless to quote a few examples thousands of years apart, especially when the sizes named differ from those in the sources quoted. The wavy walls are an economical way of building a long length of fence stiffly, like corrugated iron. The fallacies of Choisy are repeated about the walls in alternate sections being so built to prevent sliding. They are on desert where no sliding is possible. The real purpose was to build alternate towers of brick, so that thoroughly dry cross walls would hold up the outer face; when well settled, a

curtain wall was put in between the towers. The sand bed under a building is said to be incompressible; the real purpose of it was to enable the building to hold together while the soil shifted with the Nile rise, the sand easily sliding a small amount. It is to be hoped that the statements about brickwork will be brought up to the good standard of those on stonework.

L'Art égyptien. Études et Histoire. Par JEAN CAPART. Tome I. *Introduction générale, Ancien et Moyen Empires.* 8vo. 323 pp. 1924. 35 frs. (Vromant, Bruxelles.)

This volume is a second edition of the first half of the *Leçons*, which was noticed in this Journal in 1921, p. 17. By repeated halving, the first half of the present book was issued in an English translation noticed in this Journal in 1923, p. 63. There is therefore little to be said further; but we may note that here the use of *pisé* is correctly limited to the use of daub upon wattle, plastering over fences of palm sticks or maize stalk. It is gratifying to see that a public demand continues for such a substantial and authoritative work.

Les Textes des Pyramides égyptiennes. Traduction par LOUIS SPELEERS. Tomes I et II. Bruxelles. 1923.

The first of these two volumes contains a translation of the Pyramid Texts, the second contains a glossary, concordance, and indices.

It is difficult to know whether to congratulate M. Speleers on his gallantry in attempting the impossible, or to deprecate the attempt. One should know, first, what class of reader he desires to reach. It can hardly be the scholar, for everyone with any claim to scholarship has already worked through the Pyramid Texts, making his own glossary, and his own translation with the help of commentaries and notes occasionally published by the great scholars. Every scholar knows that the Pyramid Texts bristle with difficulties in words, constructions and meaning; therefore a mere translation without notes or grammatical commentary is of little use to him. If, however, M. Speleers aims at reaching the many students who are struggling alone with the difficulties of the Egyptian language—and these students are more numerous than is usually supposed—then he is certainly conferring a benefit. Maspero's translation is now unattainable except for a few, and a complete translation, such as this, gives an opportunity to students to make themselves familiar with the ideas at least, and is also a basis for further work. The very fact that many passages can bear a different construction from that put on them by M. Speleers is an incentive to further study. The perfect translation is sometimes a hindrance to further advance; but M. Speleers' translation will be used by many as a basis on which to work.

M. A. MURRAY.

Catalogue of the Ethnographical Museum of the Royal Geographical Society of Egypt. By E. S. THOMAS. 8vo. 130 pp. 50 pls. (Extract from the Bulletin of the Society, vols. xii and xiii), Cairo, 1924. 4s.

This is a most useful piece of work, indispensable for any curator who has the care of an African collection. About 500 objects are described, each with a sketch, often amplified with details; thus we have the ideal of a working list for practical comparison. The whole is classified in twenty-six sections, though unhappily no list of contents or index is provided. The interest to us is mainly in the resemblances to forms used anciently in Egypt. Most of the connections are with Somaliland and Eritrea, such as the form of drums, spacers for strings of

beads, the tapering dagger, the bows, the arrowheads unbarbed, and the flag-shaped fans from Yemen just opposite. A few things are Central African, as the harp with wide bowl base, the low bed frames, and the trap of radial spikes. This distribution bears on the unity of the Punite and Egyptian culture. Several important classes of objects are distinctly unlike the ancient forms; the use of metal bracelets has entirely driven out the old shell or horn bracelet; head rests all have four (or rarely three) legs, always carved, an entirely different line of development from the Egyptian. Clubs, throw sticks and shields are all different from the old forms. The early prehistoric tubular vases with conical foot are so much like an ivory vase of the Nyam Nyam that it suggests the origin of the form from tusk carving, but no necessary modern relation.

Les Inscriptions phéniciennes du tombeau d'Ahiram, roi de Byblos. Par RÉNÉ DUSSAUD. 4to. 23 pp. 5 pls. (In *Syria*, V, pp. 135-157.)

This article is of the highest importance in the history of the Phoenician alphabet, dealing with the earliest such writing yet found, attributed by the remains in the tomb to the XIIIth century B.C. On the end of the lid of a splendid stone sarcophagus, and along one side of it, is a clean-cut inscription stating that "Aphasbaal, son of Ahiram, king of Gebal, has made this sarcophagus for Ahiram, his father, as a dwelling for eternity. And if it be a king among kings, or a governor among governors, who encamps before Gebal, and who finds this sarcophagus under the paving, Hathor shall be his judge. The throne of his king shall be overturned, and destruction shall fall on Gebal when he shall efface this inscription at the gate (?) of Sheol (?)."

The last two words are doubted because they involve a spelling unknown before, *pp* for a duplication of *peh*, mouth, compare *bab*, gate, and *shrl* or *shbl* for *shaul*: but who can say how spelling may have been changed in some centuries before these words are known elsewhere? Another inscription in precisely similar letters is placed on the side of the shaft to the tomb, three short lines giving notice that it was tabu to descend. Two vases of Rameses II were found, and the pieces of fine Mykenaeen pottery belong to the age of Rameses II, or rather before that.

Another brief inscription of a king Abibaal has been added on the side of a statue of Sheshenq I, dedicating it to the Baalat of Gebal. This inscription has later forms of the *aleph* and *gimal*, while it agrees with the earlier form of the *kaph* on the Ahiram tomb. Thus the changes are in accord with the relative dates of the works, as the signs of 930 B.C. are intermediate between those of 1300 and 842 B.C.

This earliest inscription is recognised as having a decisive voice on the nature of the Sinai writing; the firm continuity of the Phoenician system as far back as 1300 B.C., with only slight changes, is accepted as showing that it is very unlikely to have been in a rude and inchoate stage of attempts in 1500 B.C. The Sinai writing is, what was pointed out when first found, a rude attempt to adapt some hieroglyphs (not hieratic) to a cursive script, with other pictographs brought in. The Phoenician names are not proofs of origin of the forms, but merely nick-names by which to know them: we do not think that A was originally a picture of an archer, or B of a bull, though we tell children so, to excite the memory.

Now, M. Dussaud, setting aside the Sinai writing and de Rougé's theory, is much exercised to know where the signs originated. He does not seem to know that most of them occur in the XVIIIth dynasty, sometimes used for regular

writing, and that through the XIIth and the Ist dynasty they are found far back into the prehistoric. The examples of the XIIth dynasty date¹ are placed here along with the Byblos and Mesha forms, as there can be no question that they precede those inscriptions. It will be seen that three-quarters of them are practically identical, and others are early stages of the Byblos forms. The *vau*, the *yod*, the *kaph*, the *tau* of Byblos are more like the Egyptian forms than like those of Mesha. The *mim* is evidently a cursive form of the Egyptian sign, which has a long tail added later. The *yod* sign is a familiar mark in Egypt, and agrees exactly with the Byblos form when turned. The differences are nowhere more than would naturally result through a change from engraving to cursive brush-work. It has never been sufficiently noted how both the Sinai script and the Phoenician show degradation owing to brush or pen writing; the curved connections and long tails are foreign to cutting into stone, wood or metal.

	a	b	g	d	e	v	z	h	ch	i	k
XII DYN. EGYPT	𐤀	𐤁	𐤂	𐤃	𐤄	𐤅	𐤆	𐤇	𐤈	𐤉	𐤊
XIX DYN. BYBLOS	𐤀	𐤁	𐤂	𐤃	𐤄	𐤅	𐤆	𐤇	𐤈	𐤉	𐤊
XXII DYN. MESHA	𐤀	𐤁	𐤂	𐤃	𐤄	𐤅	𐤆	𐤇	𐤈	𐤉	𐤊
XII DYN. EGYPT	𐤌	𐤍	𐤎	𐤏	𐤐	𐤑	-	𐤒	𐤓	𐤔	𐤕
XIX DYN. BYBLOS	𐤌	𐤍	𐤎	𐤏	𐤐	𐤑	-	-	𐤒	𐤓	𐤔
XXII DYN. MESHA	𐤌	𐤍	𐤎	𐤏	𐤐	𐤑	𐤒	𐤓	𐤔	𐤕	𐤖
	l	m	n	x	o	p		q	r	s	t

This brush-work implies commercial documents and letters, a frequent writing, and not merely a rare means of identifying stone monuments. We need now many more examples of early script to clear up the history of a system which began long before the Phoenicians, and has so far outlived them.

Comptes Rendus. 1924, p. 208.

At Byblos, since the departure of M. Montet, three caves have been accidentally found in the grounds of the American orphanage. The clearance has been made under the direction of the Service of Antiquities by the soldier Collin, who guards the ruins of Byblos. There were obtained a great quantity of pottery and some scarabs like those found in the great jar of the temple of Byblos. These caves go back, therefore, to the bronze age. We must ask what dynasty were the scarabs? How were they found? Were there burials? Had they been disturbed? Is "the soldier Collin" the only French archaeologist available for such an important discovery?

Metropolitan Museum of Art. The Egyptian Expedition, 1923-4.

Though the staff from New York were largely occupied with the tomb of Tutonkhamen, work was nevertheless continued on a large scale both at Thebes and Lisht. At the temple of Mentuhetep, at Deir el Bahri, the grove of trees was found, according to the plan on limestone which was discovered; the great

¹ Petrie, *Formation of the Alphabet*.

tomb known as the Bab el Hosan was completely cleared, and it proved to end in a chamber almost exactly under the supposed pyramid of the temple above. The great enclosure of the court of Mentuhetep's temple is now found to the north, and it seems that nearly all of Hatshepsut's temple was within the sacred area of the earlier king. The tomb of queen Neferu has been found, and many wax ushabti figures in model coffins of wood; on these, and on pieces of sculpture from the tomb, the name of the queen's mother is Aoh, which is that of the mother of king Neb-kheru-ra Mentuhetep. Beside this, scratched on the north wall of the court of the temple, there occur several times the words "Son of Ra Antef given life," with a cartouche round Antef. This is evidently the heir Antef shown with Mentuhetep and Queen Aoh at Shatt er Rigaleh. Moreover, the seal bearer Khety represented there is identical with the same official whose tomb has been found at Deir el Bahri. Thus the whole group of Shatt er Rigaleh are now accounted for.

Foundation deposits of Hatshepsut, now discovered, show that the original plan of the front of her temple was considerably altered. Though no grove of trees was before it, some papyrus pools were found cut in the rock, with dried-up mud and bits of papyrus stem remaining. Several more details were recovered of the forecourt of this temple, also the great tomb in which the 153 priests of Amen were found in 1891. In another tomb of the XXIst dynasty a well-preserved burial with coffins of a princess Hent-taui was obtained, with two others. She was probably a daughter of Men-kheper-ra, whose sealings were found here. Later burials had also been piled in the tomb and, all around, burials continued down to the fall of paganism.

At Lisht, the excavations were renewed after five years' suspension. The pyramid of Senusert I proves to have been on the system of the Lahun pyramid, with eight radial walls, and cross walls of stone, forming pits filled in with rubble instead of brick as at Lahun. Wide clearances of ground were made, and a few good things turned up, which had been missed by plunderers. Last of all was a fine XIIth dynasty seated figure of an official, but nothing that adds to what we knew.

Mr. N. de G. Davies and Mrs. Davies have continued their copies of the tombs, particularly making facsimiles of the foreigners of Rekhmara and of Rames.

Haremhab, commander in chief of the armies of Tutonkhamon. By H. E. WINLOCK.

In this Bulletin is described a beautiful seated figure of the great general Haremhab, cross-legged, holding a roll of papyrus. It is of life size in grey granite, 3 ft. 10 ins. high, and now in the Metropolitan Museum, New York. On it he says:

"I was the most righteous of the courtiers; upon the announcement of any crime, I was ready of tongue in rectifying it.

"I enforced the laws of the king; giving regulation to the court and guidance through my mouth, and there was nothing which I did not know.

"I was the leader for every one; seeing that every man knew his course, and not forgetting myself that which was entrusted to me.

"I was one who gave communications to the Lord of the two lands; the mentor of all the forgetful, and was not unmindful of the words of the Lord.

"I was one who reported to the Council; nor did I neglect the designs of his Majesty."

From the invocation to Ptah, Ptah-Osiris, and Osiris of the Memphite Sanctuaries, it is evident that this was found at Memphis, as is reported. An outline of the life and politics of Haremheb are given, but no mention of his Memphite tomb and its sculptures, which were abandoned when he became king.

The Metropolitan Museum has also acquired a large alabaster jar of Merneptah with bull's head handles, and a blue glass lotus cup (stem restored) of Tahutmes III, both given by bequest of Lord Carnarvon. The astronomical ceiling of the tomb of Sety I has been photographed, and is reproduced (Bull. Dec. 1923); also a squatting figure of Hor, a Bubastite official, from the region of Denderah.

The Oxyrhynchus Papyri. Part XVI. By B. P. GRENFELL, A. S. HUNT and H. I. BELL. 8vo. 343 pp. 3 pls. 1924. 42s. (Egypt Exploration Society.)

This volume is of Byzantine business documents, needful for building up a view of the period. The most interesting details are in A.D. 496, the lease of a ground-floor room facing south, at a third of a solidus, or four shillings, yearly; in A.D. 495 a loan of 2 solidi (24s.) at 1 per cent., presumably *per* month; and in A.D. 554, under Justinian, a widow was obliged from poverty to give away formally her daughter of nine years old, to be adopted by a shopkeeper and his wife, with a proviso that if the girl was ever reclaimed all expenses of her maintenance would be repaid. For the history of the produce, and its management in business, there is a large amount of detail.

In an article on the Hittites, in the *Journal of the Society of Oriental Research* (January, 1924), Prof. Mercer takes the position that Taiy was not Gilukhipa, but was another Mitannian princess, "for the name is Mitannian in character (see Ta-a-a, Ta-i-til-la). She was thoroughly acquainted with political circumstances; she corresponded with Tushratta in favour of Amenophis IV; she influenced the politics of her husband and son; and Tushratta sent special gifts to her, and greeted her on several occasions."

In *Art in America* (October, 1923) Mr. Walter Roselle publishes a steatite figure of a couchant bull of Babylonian work, having the trefoil spots on it, like those on the couch of Tutonkhamen; such spotting is otherwise unknown in Egypt.

A remarkable series of basket work patterns on pottery bowls, some like those of the white cross-lined pottery of prehistoric Egypt, is given in *Designs on Prehistoric Mimbres Pottery*, by J. WALTER FAWKES (Smithsonian Coll., January, 1924). This ware of New Mexico is also distinguished by surprising figure designs, as spirited as the first Susian work.

As an example of archaeological work, we must welcome Prof. Hamada's report on an *Ancient Sepulchre at Midzuo*, with 29 plates. This follows the best style of western research and includes a diagram of the limits of dates from ten different kinds of objects, showing within what years they all agree. The mid date is A.D. 500, and the tomb was that of a prince, with jewellery, diadem, swords and a great variety of pommel patterns. Happily, Prof. Hamada keeps up the provision of an English summary, in 28 pages.

Catalogue of Muhammadan Textiles of the Medieval Period. By A. F. KENDRICK. 8vo. 74 pp. 25 pls. 3s. (Victoria and Albert Museum.) 1924.

This catalogue is a continuation of the three volumes on Textiles from Egypt, noticed in this Journal 1921, p. 57; 1922, 54; 1923, 87. The earlier examples here are from Egypt, and are dated during the XIth century. There seems to be a breach between these and the earlier work of Byzantine age, suggesting that the earlier examples do not extend far into Arab times. The question now lies as to what textiles can be ranged in style between the two groups, to represent the first three centuries of Islam. Three quarters of the catalogue is occupied by Egyptian stuffs; the other examples are of Syrian, Sicilian, Spanish or Chinese origin. The difficult questions of origin and trade diffusion are discussed, so far as the scanty sources permit, drawn from the woven inscriptions, places of finding and medieval statements, bringing in the evidence of Continental specimens. There is a richness and fullness of the Chinese examples, which curiously continue the themes of the western art with an aesthetic difference. The latest style here is in no. 973 of the XVth century, which is of Syrian Levantine design, familiar in Turkish work. The subject needs far more examples from dated sources to disentangle the various lines of design. This welcome catalogue rounds up Mr. Kendrick's work, which will be a boon to curators.

Lettered Egyptian Textiles in the Victoria and Albert Museum. By STEPHEN GASELEE. 4to. 12 pp. (*Archaeologia*, 1924.)

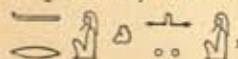

This is an appendix to the catalogue by Mr. Kendrick, dealing with the woven inscriptions in Greek and Coptic. Unfortunately these are almost entirely names of saints, and in no case is there any evidence of data from the words.

PERIODICAL.

Zeitschrift für Aegyptische Sprache, Vol. LIX, Pt. I, 1924.

SETHE, K.—*Die Sprüche für das Kennen der Seelen der heiligen Orte* (continued). This portion of the article deals with Chapters 109 and 107 of the Book of the Dead. The subject matter of these chapters purports to be the "souls of the East"; the claim rests entirely upon their mention in line 19 of Chapter 109, without consideration of the context. These chapters are grouped with Chapter 108, which refers to the "souls of the West." An early connection between these chapters is manifest in the similarity of their titles; "To enter and go forth by the eastern (or western) gate of heaven," and in the joint appearance of the texts in a different version in Chapter 149.











Chapter 109 is clearly divisible into three independent parts, which are held together only by a common reference to the eastern sky; all begin with the words "I know." The speaker knows (1) The gate through which the morning boat of the sun god issues in the morning; (2) the two sycomores between which the sun-god rises; and (3) the "Fields of the Reeds," whose rich corn crop is harvested by the "souls of the East." The triad of gods named at the end of this Chapter consists of Horus of the Horizon, a calf, and the morning god (*ntr dwꜣy*), i.e., the morning star. In a handbook of religious terminology of Roman date (Berlin Pap. 7089) the "souls of the East" are given as Ra-Horus of the Horizon;

 (the god of Ombos, Kus and Letopolis) and .









The god which takes the place of the calf of Chapter 109 in this papyrus appears as herdsman of the calves in Pyr. 771.

SCHARFF, A.—*Briefe aus Illahun*. This article deals with 55 letters in the collection of Berlin papyri from Illahun. Most of these letters are addressed to the temple scribes of Illahun, and they throw some light on temple administration, though the subject matter consists mostly of complaints about insufficient supplies of work-people or offerings. The letters appear to cover a period of nearly 90 years in the reigns of Senusert III and Amenemhet III. In some cases, letters dealing with similar subject matter are fastened together. The draft of the reply is often written between the lines in red. The name of the sender is only included in the address in the case of a letter from a subordinate to a superior. From one letter it appears that the *Wag* festival was a movable feast, since it was to take place on the 17th day of the 2nd harvest month. The dates for this festival in the Middle Kingdom and New Kingdom, known from other sources, were the 18th or 17th day of the 1st month of Inundation.

SCHARFF, A.—*Illahun und die mit Königsnamen des Mittleren Reiches gebildeten Ortsnamen*. A variant in the Illahun papyri leads the author to challenge the accepted meaning "mouth of the canal" for the Egyptian name for Lahun (*rḥn-t*). From evidence in the Illahun letters, Scharff attributes the places near Lahun called *nḥ*—Senusert and *ltp*—Senusert to Senusert II, and not to Senusert III (Griffith *Kahun Papyri*). Furthermore, a new place-name, *nfr*—Amenemhet may denote the pyramid city of Amenemhet III.



EBBELL, B.—*Die ägyptischen Krankheitsnamen*. The use of a particular remedy for one malady only by the Egyptians and Greeks alike leads to the conclusion that the Greeks learnt the treatment from the Egyptians and that the illnesses were identical. The application of this reasoning enables Ebbell to identify    *nššk* with *Alopecia areata* and      *sꜣrw* with night blindness (*hemeralopia*), whilst the treatment for an eye complaint called   *lḥn* implies that the injury was due to a blow.

SETHE, K.—*Die angebliche Rebellion des Amenhotp unter Ramses IX*. In *Zeitschrift* 58, Spiegelberg connected a passage in Mayer Papyrus A with the rebellion of Amenhotep, high priest of Amen under Rameses IX. Sethe contends that the act of violence in question was committed *against*, not by, the high priest.

SETHE, K.— *m-ḥn.w* "im Innern" eine Rebuspielerei. The rebus  for    "inside," which first appears in the Middle Kingdom, is traceable to the old custom of writing in vertical lines. It actually reads thus: *mw* ("water") *hr* ("is under") *nw* ("pot"), *mw* standing for *m* and *hr* for *h*. The abbreviation  for *ḥn.w* "interior," which is not known earlier than the XIXth dynasty, is based on ignorance of the real meaning of the expression , and assumes the phonetic value *ḥnw* for .

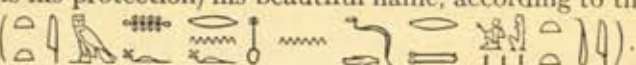
SETHE, K.—*Eine bisher unbekannte enklitische Negation im Altaegyptischen*. An emphatic negative, hitherto unknown, is to be found in the enclitic particle *w* in an inscription of the time of Pepi I found by Reisner in 1913, and also in the stele from Abydos of Mentuhotep, vizier under Senusert I (Cairo 20539).

DE BUCK, A.—*Zum Ursprung der Relativformen im Aegyptischen*. This article is a further contribution to the study of the origin of the relative forms in Egyptian, which has been discussed recently by Sethe (*Zeitschrift*, 1918) and by Gardiner, *Revue égyptologique* II, 1921.)



KEES, H.—*Nbd als Dämon der Finsternis*.—In *Zeitschrift* 1922 the author discussed a demon called *Nbd* "the evil one," whose epithet "son of Nut" obviously connects him with Set, and who is also known as the evil spirit of the Beyond. In a Berlin papyrus of the Heracleopolitan period, the determinative of the name is , not the animal's hide , and as the night sign is often rendered by the hide in Coffin Texts, it is probably the original determinative in this case also. The "evil one" is clearly an evil spirit of darkness, the enemy

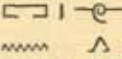
of the god of light, another form of the arch fiend who usually takes the shape of a snake. In a XIIth dynasty text, Kees finds the old *motif* of the fight between the god of light and the fiend of darkness transferred to the Osiris legend ("seized is *Nbd* who is in the darkness"), and invocations to Osiris such as "thou awakest to life, see, the earth is light" clearly show a connection with the return of the sun from darkness and the underworld. These passages have some bearing on the transference of Set to the Osiris myth as the murderer of Osiris, as in some texts Osiris seems to be in danger from his enemy at night time, even after death.

MISCELLANY.

SETHE, K.—*Noch einmal zu den Kurznamen auf j*. To his previous work on pet names (*Zeitschrift* 1923) Sethe adds the extraordinary nomenclature of a XIIth dynasty official at the pyramid of King Tety of the VIth dynasty. This man was known as "*Tty-m-s-³f* (Tety is his protection) his beautiful name, according to the naming of the people *Tt·y*" ().

SETHE, K.—*Zum Namenswechsel des Königs Phios (Pjbj I)*. A further example of the change in name of Pepy I. [Really only battered, but no name substituted.]

GUNN, BATTISCOMBE.—*The writings of the word for "grapes."* The writer suggests explanations of (1) the inexplicable presence (according to Sethe in *Zeitschrift* 1923) of the ideographic  in place of phonetic  in the word for "grapes," and (2) the vocalisation of *gawoag*.

GARDINER, ALAN H.—*The term*  *pr-n-st₂ in Pap. Mayer A*. The writer quotes a confirmatory example (Urk. IV, 639, No. 21) of his view of this term *n-st₂* as meaning "which can be dragged."

L. B. ELLIS.

NOTES AND NEWS.

THE article on the Galla origin of the XIIth dynasty (1924, p. 38) has called forth a reminiscence from M. Daressy that "already in past days of the Bulaq Museum, my colleague, E. Brugsch Bey, told me that Dr. Schweinfurth, the great traveller, had been struck by the resemblance of the sphinx of Tanis to the Galla type, and that he had been the more interested because, according to a tradition among the Gallas, their ancestors had conquered Egypt." This is good confirmation of the connections pointed out, as Dr. Schweinfurth's wide acquaintance with African peoples in his continual travels makes him one of the best witnesses on the subject.

British School of Archaeology in Egypt.

Miss Caton-Thompson, accompanied by Miss Hughes, reached camp 1 in the desert north of the Fayum, by the middle of December, to work for the British School on the prehistoric settlements. The well-known Fayum flints, now nearly all swept away by native dealers, have risen to historical importance since the discovery of the Badarian civilisation as their equivalent. Half a dozen of the best-trained men are in the party, and are going excellently. The main difficulty is keeping up the water supply; as all local opinion said that the desert there was impossible for a motor car, it required the determination of Miss Thompson to make it succeed, as she has done. The existence of the party depends on keeping up a thirty-mile desert run of motor daily to fetch water. Happily, a good driver, with war experience, was obtained.

After a fortnight at camp 1, not very far from the Michigan work at Kom Ashim, the move was made to camp 2, where many small settlements were found with much pottery. A fortnight later, camp 3 was pitched at Kasr es Sagha, the small perfect temple about five miles north of Dimay. The whole question of the prehistoric limits of the lake and the settlements will be fully worked out. Finding the aneroid unsatisfactory, Miss Thompson has levelled up from the lake for over five miles, to make certain of the positions. There was a settlement of some rich folk in the XIIth dynasty near Kasr es Sagha, the only historic remains found, but prehistoric pottery and flints extend far along the former water level. This region searched, Miss Thompson has now joined Mr. and Mrs. Brunton, who have resumed work at Badari.

Egypt Exploration Society.

Everyone interested in archaeology will deplore the sad death of Mr. Newton, who was one of the most zealous and accurate of excavators. His loss leaves a gap which cannot be filled as regards architectural research.



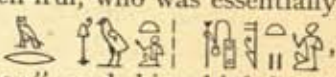
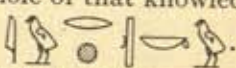
FIG. 1. XIII DYNASTY, STELE OF SENIRUI, LOUVRE.

ANCIENT EGYPT.

THE STELE OF THE ARTIST.

C 14 OF THE LOUVRE.

THIS inscription has been studied by many scholars ; the content is therefore well known, but there are two points on which I venture to offer some suggestions.

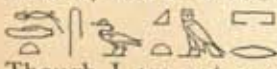
The stele (Fig. 1) is the inscription of a certain Sen-irui, who was essentially the skilled technician, as his titles show. He was the . "The overseer of the craftsmen, the artist-sculptor," and his chief boast was that he was "a craftsman excellent in his craft, supreme (lit., coming out on top) in his knowledge." He recounts the whole of that knowledge divided under four heads, each beginning with the words . The first gives his religious knowledge, *i.e.*, his acquaintance with the liturgy ; the second, his scientific knowledge ; the third, his artistic knowledge ; and the fourth, his technical knowledge.

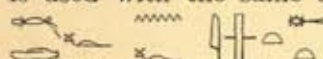
It is with the second of these sections that I propose to deal. I give the chief translations of these phrases. Maspero (*Trans. Soc. Bibl. Arch.*, V, p. 559) : "I know what belongs to it, the sinking waters, the weighings done for the reckoning of accounts, how to produce the form of issuing forth and coming in so that a member go to its place." Madsen (*Sphinx*, XII, p. 248) : "Je savais les règles de la peinture (?) et les poids des justes calculs . . . jusqu'à ce que le membre soit à sa place." Sottas (*Rec. de Trav.*, XXXVI, p. 154) : "Je connais les formules de l'irrigation, les comptes de fournitures des exemples de calcul, les prélèvements et livraisons en entrées et sorties, de telle manière que tout corps animé vient à sa place." With all diffidence I would suggest a fairly literal translation : "I know the things which belong to the sinking of waters, the weighings of exact calculation, the cutting of that which enters and the coming out, it enters in order that a limb may come to its place."

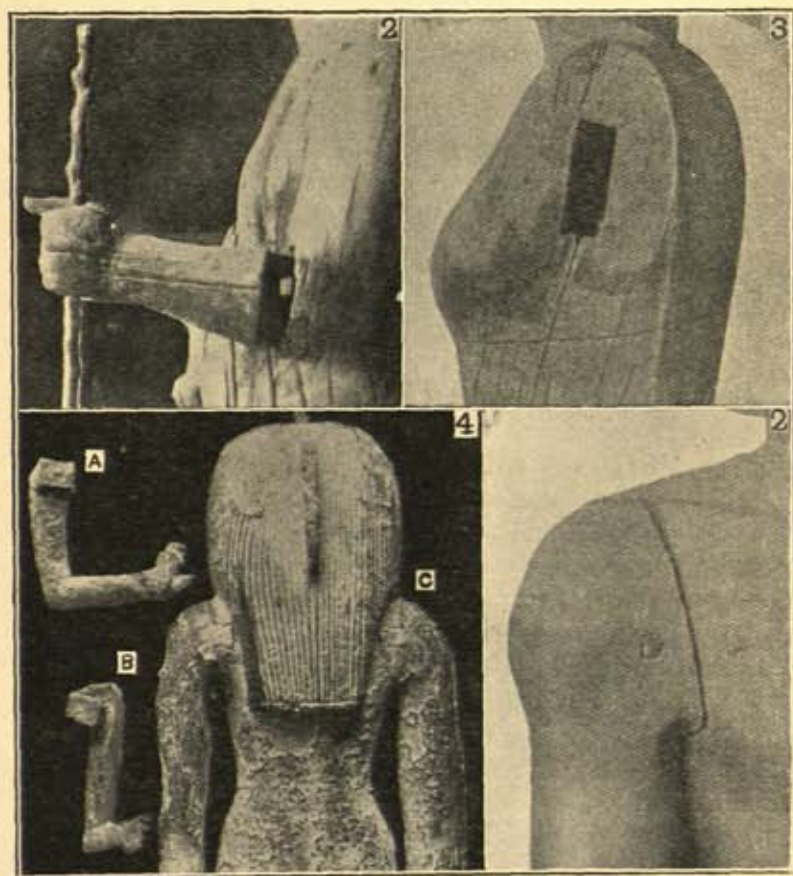
The whole inscription deals with Sen-irui's profession as an artist and technician, and this section describes that mathematical and scientific knowledge which made him supreme in his profession. There is nothing whatever to show that he was in any way concerned with the administration of the country, as must have been the case if M. Sottas' translation were correct, nor is there any reason to connect the "sinking waters" with the Inundation, for it is the rising and not the falling of the Nile which is all important for agriculture. If, therefore, this section refers to Sen-irui's special knowledge of his profession, it must have been something much higher than any which might have been shared by a

shrewd and observant peasant. Mr. Sloley's paper in *ANCIENT EGYPT*, 1924, (pp. 43-50) suggests very strongly that the "sinking waters" are a reference to water-clocks. Sen-irui's knowledge was obviously of a very high order, and a considerable knowledge of mathematics was required for the construction of water-clocks, in order to calculate the volume of water, and also for the scales necessary for the difference in the length of the hours in summer and in winter and the difference in the flow of water according to the seasonal temperature. As the early water-clocks in Egypt were of the outflow type, the "sinking waters" are thus explained.

If this explanation is accurate, the "weighings of exact calculation" will also admit of explanation. The determination of a volume of water is very conveniently carried out by weighings, since the volume is proportional to the mass (this principle was made use of by Galileo for time measurements). In one of the *Oxyrhynchus Papyri* (Vol. I, 470) there is an attempt to determine the volume of the "hourly" outflow from the vessel. First, the volume of the whole "12-hours" flow is calculated by a rather clumsy inexact formula, then the volume for each "hour" in turn. Borchardt (*Geschichte der Zeitmessung und Uhren*) figures sacred cubit-measures, on which the fractions are accompanied by names of months and the words "hours, filled with water." This evidently refers, as Borchardt observes, to observations connected with water-clocks. It seems clear, then, that Sen-irui records in these two phrases—"I know what belongs to the sinking waters, and the weighings of exact calculation"—that his knowledge of mathematics was so far beyond that of his fellows that he could make an accurate time-measure.

The third phrase of this section of the inscription has constituted a problem. Maspero regards it as having a mystically religious meaning; Madsen does not attempt a full translation; Sottas sees a reference to administrative work quite out of keeping with the rest of the inscription. It is the first part of the phrase which presents the whole difficulty, yet the second part, "in order that a limb may come to its place," offers the solution. Again, regarding Sen-irui as "a craftsman excellent in his craft, supreme in his knowledge," this phrase must refer to some complicated technical work. Diodorus (I, 98) gives the clue; he states that two brothers, Telekles and Theodorus, made a statue of Apollo between them, one working at Samos, the other at Ephesus, and that when the parts were assembled and put together the statue appeared to have been the work of but one man, so accurately had the work been done by measurement. Diodorus goes on to say that the making of composite statues "is practised especially among the Egyptians. For among them, the form of statues is not judged from the appearance to the eye, as among the Greeks." The artist, the chief of the craftsmen, who designed the statue, must have made accurate measurements as to the various parts, and as to where and how the pieces should fit together. Though the account given by Diodorus is a late one, composite statues made of several pieces and fitted together are known from the Old Kingdom onwards. This fitting was done either by pegs (Fig. 2), or by a mortise-and-tenon joint (Fig. 3), or by a dovetail (Fig. 4). The mortise-and-tenon appears, however, to be the earliest, and it is this form of fitting which I take to be described in the phrase , "the cutting of the mortise (*s-k-t-m*) and the tenon (*pri*)." Though I am not aware that such a word as *s-k-t-m* exists in Egyptian, yet the combination of verb and preposition to form a noun is common in all languages,

and such a noun often has a technical meaning (*e.g.*, offset). I therefore suggest that *škt-m* is a technical word, like our own mortise; in which case *pri* must be the tenon which fits into the mortise. The word *šdt*, "to take or cut out," is used with the same spelling in the Pyramid Texts (W 511, Sethe, § 402*b*), . He takes (or cuts) out for him—that which is in their body." In the wooden statues of the Old Kingdom, the tenon, after being slipped into the mortise, is held in place by one or more wooden pegs, which, when sawn off close and covered with a thick coating of paint, would be practically invisible (Fig. 5). The pegged figures showed the join even less, as the pegs them



selves were hidden. The dovetail was much used for metal figures, and for fixing the arms. The dovetail was on the arm, the slot on the body of the figure, and both are actually part of the casting. In Fig. 4, A the dovetail was slipped in from above downwards, in Fig. 4, B, C, it is put in sideways. In these metal figures, the joint is so close and so accurately made that it is only visible on careful examination, and is easily missed by a careless observer. Here, then, it is evident that Sen-irui is again proud of his technical skill, that he could so calculate the measurements of a composite statue, with the positions and sizes of the mortises and tenons, that when put together the statue appeared to be made in one piece. When the tenon is put into the mortise, "it enters so that a limb comes to its place."

M. A. MURRAY.

THE GREAT PYRAMID COURSES.

WHEN in Egypt last year, Mr. J. Tarrell, of Alexandria, kindly showed me a paper on an interesting question which he had been studying, and wished that it should be brought forward and discussed. This article is the result of the suggestion, along with some subsidiary matters. It had not previously been noted how the variations of the thickness of different courses of the Great Pyramid tended to group around certain lengths, and the enquiry hence arose, was this grouping due to different standards of measure used by the masons? or was it due to multiples of the usual Egyptian digit which were chosen so as to unify the thickness of each course?

We must picture to ourselves the actual conditions. It would require far longer labour to cut out and trim the stones to gauge, than to transport and fix them. Hence the cutting must have been started when the preliminary work was laid out, and must have continued during the ten years of preparations, before the twenty years of actual construction, according to the very likely statement of time by Herodotos. There must have been, therefore, about a third of the whole material, or nearly a million blocks, lying out at the quarries, covering hundreds of acres, before any building was begun. This would give opportunity to sort over the thicknesses, so as to avoid needless waste in trimming, and then the blocks which were most nearly of the same height would be finally dressed to correspond for one course.

Thus about 720 inches height of the pyramid (a third of the bulk) would be built from material of ten years' quarrying, and the remaining 5,050 inches (two-thirds) would be quarried during the twenty years of building. This brings to light an interesting explanation. It has been a puzzle hitherto, why the pyramid courses, a dozen times or more, start with a thick course, and then dwindle into several thinner courses until a big start again appears. From the base upward, the 667 inches of the first quarrying steadily diminish in course-height, until course 19 is reached, which starts a fresh series. The first batch of quarry stones lay out waiting; when the masons were ready to build they shifted the quarrymen over to another quarry, and began to pick and choose the blocks, so as to get enough of uniform size for a whole course, naturally beginning with the largest.

In the black block diagram (1) will be seen the courses of the pyramid as piled up, on a vertical scale of 1 : 800. The thickness of each course is represented by the length of the horizontal bar of that course, on a scale of 1 : 40. This enables the variation of course-height to be readily seen, and it is clear that repeatedly the building started again with thicker courses, which gradually tailed off to thin ones. It seems obvious that each such start on thicker blocks was the result of shifting to a fresh quarry field, where the picking over began, from the largest down to the smallest blocks, so as to obtain even courses. It would be impossible to let quarrymen dump fresh blocks, mixed up with those that were being gradually chosen, and sorted into groups for each course. The men would be turned on to a new quarry, or back into one of which the output was used up. We can thus trace apparently nineteen shifts of quarrying, each time taking a field of blocks, and selecting them in order of size. From this we can reckon roughly what labour each of the quarry fields represented; starting with nine year's labour (or rather more, allowing for the unwieldiness of the blocks), the quarry groups worked at one place for about $5\frac{1}{2}$, 3, $3\frac{1}{2}$ down to only one year, and only a few months for the latter stages of the building.

The use of a fresh field of blocks was started when definite stages of the pyramid size had been reached. The area of the square at different levels is marked down the left edge, the units of area being a square of one-fifth of the pyramid base, or one-twenty-fifth of that area (see *Pyramids and Temples of Gizeh*, p. 184, pl. viii).

With the working system thus before us, we may now examine the fluctuations in size of the courses, as Mr. Tarrell proposes. The second diagram here is divided into three portions for convenience of printing, but it runs on continuously and the results of the measured thickness of the courses is shown by the scale of inches beneath the curve. As the courses vary much in precision they cannot be merely added all together; one course is the same to a tenth of an inch across the pyramid, another varies an inch or more. The only way to treat them is to give an equal area of the curve to each course; thus the uncertain courses will spread out shallow, and the exact courses will rise up high. To do this, each tenth of an inch of variation of a course was weighted inversely as the extent of variation. This process gives the curve of the heights of the courses shown here.

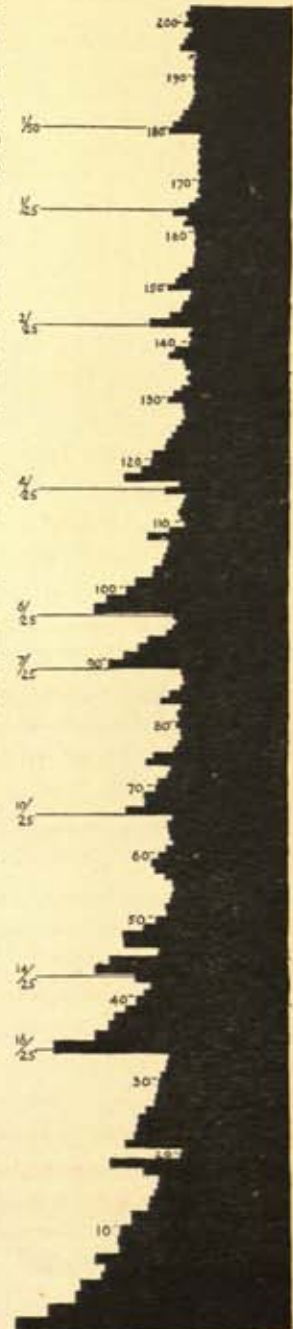


DIAGRAM 1.

At the beginning of the curve it is clear that many courses were intended to be a cubit thick, 20·6 inches; there were also two courses of the double cubit of 41·2 inches (at the end of the curve). Between these we may see a digit measure used, numbered above the curve; there is a peak at 50 digits; another at 40, the

diagonal of the cubit. There may also be groups at 30, 32 (?), 34, 36 and 38 digits. Thus many of the sizes of courses can be accounted for on the usual digit scale, just as our masons might work up irregular stones by trimming to the next inch of size.

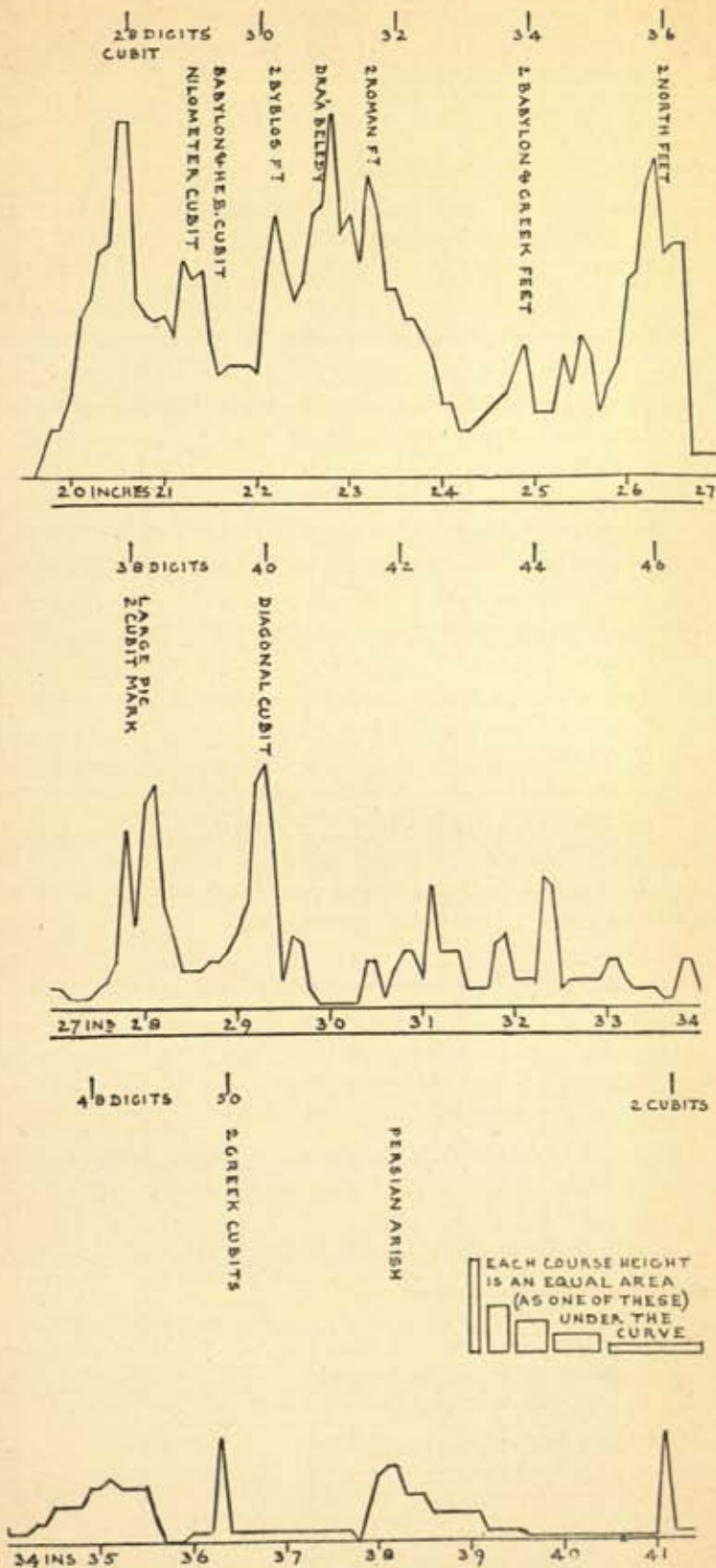
There are, however, some large exceptions, which give ground for Mr. Tarrell's view that local measures were used, perhaps by groups of foreign captive workmen, and that such measures may have survived in use to late times. The group at 21·3 inches is the mediaeval Nilometer cubit. The group at 22·2 inches is the double foot of Syria, known from the XIIth dynasty at Byblos, and found in monuments down to Roman times. The group at 22·8 inches, which is one of the largest, is the popular Egyptian measure of the country, the *dra'a beledy*. Another group close by it, at 23·2 inches, is the double Roman foot, which was an ancient measure in Etruria. As there are thus some strong suggestions of un-Egyptian measures, it is not unlikely that the large group at 26·3 inches is the double of the northern foot; a scale of this foot is known in the XIIth dynasty, and it was used down to Ptolemaic times, when a fine standard scale was made at Memphis. It was of northern origin, as it was the Germanic foot, and is the basis of English measures from the piling of Silbury Hill down to our present furlong and chain; it was also important in France. On the Egyptian standard cubits there is a cubit mark at 19 digits; this is clearly an independent measure, and here we see a good group at the double, 38 digits, or 28 inches, which is also the modern Turkish pik. Further on there is a group at 38·1 inches, which is the Persian arish.

It may be thought that one or two courses might be casual chance sizes; but as a single course consisted of 100,000 stones in the lower part, and 50,000 even at 50 courses up, it is certain that the size must have been not a mere whim, but a deliberate choice for thousands of men working a whole year. If they do not follow the Egyptian measure, some other definite standard must have been in use. Possibly some sizes adopted for convenience here may have originated the later measures.

It seems, then, that there is good ground for the proposal to see in these abnormal courses an early use of various strange units of measure, which were not officially recognised anciently, but which have survived in one form or another down to the present time.

J. TARRELL,
per F. PETRIE.





A TUT-ANKH-AMON PORTRAIT AT THE NY CARLSBERG GLYPTOTHEK.

At the large auction which took place on the 30th of April, 1890, in Paris, where M. R. Sabatier's private collections of Egyptian, Greek and Roman antiquities were scattered to the winds, the late Carl Jacobsen, Ph.D., the founder of the Ny Carlsberg Glyptothek, succeeded through the kind assistance of Dr. Sophus Müller, the former Director of the National Museum, in obtaining some statues which always will be considered as some of the greatest treasures of the Egyptian Department of the Glyptothek. Among these was a head, which, owing to its flat, cap-like crown, could easily be identified with the god Amon from Thebes, and it is also designated as such by M. G. Legrain in his catalogue of these auctions.¹

Judging from the size of the head,² it must have belonged to a statue two metres high. The crown was at one time decorated with the long feathers which are typical of the god Amon, but unfortunately these are missing, as is also the back of the head. Further the tip of the nose has been broken off, and the chin and the right part of the lower lip is somewhat damaged. Of the left ear and the beard only very little remains. Apart from these damages, which, as far as the nose, mouth and chin are concerned, were restored in 1924 by Mr. Elo, the sculptor of the Glyptothek, the head is well preserved.

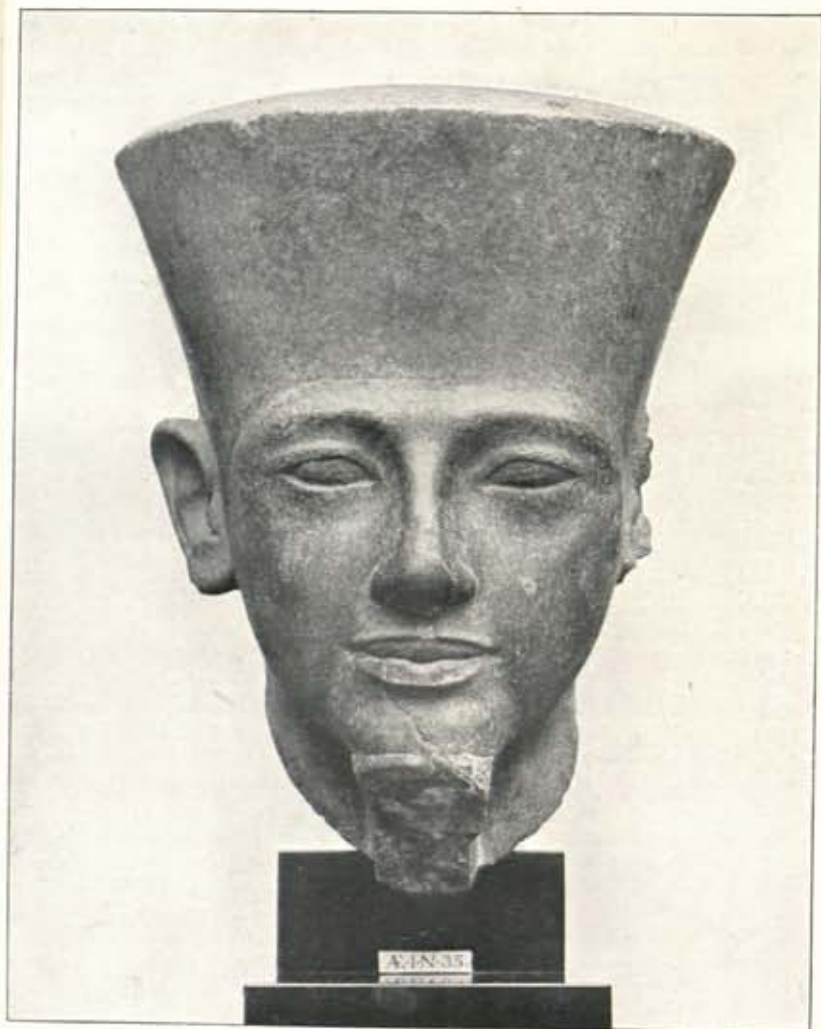
In comparing the head with the various famous Tut-Ankh-Amon statues found in different places, I have been struck with the likeness it bears to them. It has the same sloping forehead, the eye-balls are placed in their sockets in a naturalistic and life-like manner, thus producing—in spite of the weary look—an expression wonderfully alive in comparison with Egyptian art in general, where the eye never seems able to wink. The heavy cheeks have strong, high cheek-bones, but the narrow jaws, the hollowness round the eyes and nose, and the nose itself with its sharp almost emaciated bridge, and last, but not least, the tightly closed mouth, gives the face the delicate expression so characteristic of Tut-Ankh-Amon.

On the strength of these observations, I believe to be able to maintain that the Ny Carlsberg Glyptothek is in possession of a portrait of the Pharaoh who, during his short reign, was eager to reinstate the god Amon in the rights denied by king Amon-hotep IV. No wonder therefore that he again and again let his own likeness be reproduced in the Amon statues, which he erected to the honour of this god, and that he felt fully in his right when proudly calling himself "Tut-Ankh-Amon—the living picture of Amon."

MARIA MOGENSEN.

¹ Collection Sabatier, No. 258 quat., p. 37.

² V. Schmidt; *Katalog over den ægyptiske Samling paa Ny Carlsb. Glyp.*, Nr. 61; S. 115.



HEAD OF AMEN-RA WITH FEATURES



OF TUTANKHAMEN. NY CARLSBERG.

STUDIES IN THE COPTIC PROPER NAMES.

CONSERVATISM amongst the modern Egyptians, which is so very strongly marked in many different phases of their actual civilisation, is unfortunately failing in the question of proper names adopted by the Copts. In fact, one can very rightly say that the Copts never showed a greater tendency to change in any way or phase of their modes of life than in their proper names.

The object of a detailed study of proper names does not carry only a mere superficial interest, which ceases immediately the sense of the name is known. Proper names often elucidate, in their study, important historical facts. They show the degree of piety of their people, they point to the status of politics of the age during which they were used. They often give an insight into the degree of poetical imagination of their bearers. They often mark the rise and fall of certain religious and social movements, and of particularly distinguished personages. They may point out changes in the conception of numerous doctrines. They give clues to the situation and boundaries of extinct towns and villages, and thus help to the study of ancient geography. The classification of scientific deductions that might thus accrue from a detailed study of proper names is a subject by itself, and cannot be attempted except when sufficient data have been accumulated.

There is no doubt that natives have adopted deity-bearing (theophorous) names in the times when they were most fervent about their faith. The commonness of a proper name in a certain age usually means the appearance of a certain hero who bore that name and made it popular. He may have been a king, politician, prophet or any other leader. When a weaker community adopts the names of a stronger nation it means, though not invariably so, a subjugation of the former by the latter—indeed, imitation is the best proof of flattery. When religious names change in their form they usually mean a change in the conception of an old dogma. The innumerable proper names that show a relation to a town or a country often survive the place itself. Of this type we have the numerous names of European aristocracy which were inherited through generations, and remained until the very traces of the towns that gave them their names had disappeared. In this manner one can classify proper names in Egypt into the following classes :—

- (1) Theophorous names, or those bearing the name of a deity.
- (2) Geographical names, or those relating to the property of the bearer or the place of birth.
- (3) The purely qualitative or adjectival names that denote a quality or some sort of virtue, most often non-existent, or a particular characteristic of the person, almost always exaggerated.
- (4) Complex names.
- (5) Obscure names, the origin and the sense of which is not known.

Names are like fashions. There are groups which are in vogue for one generation and then disappear, only to reappear some time afterwards. There are names which remain vulgar, only used by the lower classes, and almost entirely absent in the higher circles. Notice that this fact is particularly characteristic of the English people, whose rich classes keep their own names. In Egypt to-day the poorer classes, particularly the uneducated ones, find it difficult to adopt some of the highly resonant names of the gilded society.

In Egypt, names follow politics more than religion, in particular since the Mohammedan dominion, and even before that. During the height of the Roman rule, all Egyptians, even those of pure blood, began to copy Greek and Roman names.

When Christianity was introduced in the country a great many Greek names were adopted, and a still greater number of Biblical ones. Most of the ancient Egyptian names disappeared, but when the Church of Egypt was separated from the Church of Byzantium, after the Council of Chalcedon, the Copts returned to their old Egyptian names, and the number of Greek ones was perceptibly diminished.

During the earlier Moslem persecutions the Copts were not allowed to bear ambiguous names which did not show their creed; but in periods when the sultans were more clement to them they adopted names which carried an entirely Arabic stamp. The early papyri and ostraka, that date from the first Arab dynasty, show beyond any doubt that the Copts adopted such very Mohammedan names as 'Aly for a man and Fatmah for a woman. Soon afterwards they forebore. The names of certain prominent Copts that lived during the Fatimite period—the then rulers were of very good will towards them—sound like the names of great Mohammedan shékhs. Indeed, the only name that was never adopted by them was the word Mohammed and its derivatives—Ahmad, Hamid, Mahmud, Hāmād, etc. Last of all, in our own days, with the changing phases of politics, we find people bearing really hybrid names. Turkish forms of Arabic names—adopted from their compatriots the Mohammedans—added to purely European names.

The influence of the American and English missionaries over the simple Upper Egyptian Copts has brought a further hybridism in our oriental nomenclature. We often meet with Kitchener, Wilson, Dickson, Allenby, William, Herbert, Alfred, Edward, Henry, Wolseley, and Lily, Daisy, Marjorie, Nelly, Katie, etc., etc., all very uncouthly added to purely Egyptian or even Arabic Mohammedan names—to wit, such as William Hosmy and Edward Fahmy.

From a historical point of view we can thus divide up names into groups that show very plainly the state of affairs during the period when they were used; such groups are as follows:—

1. During the early part of the Roman Period, before Christianity was proclaimed as the State religion, Egyptians used old Egyptian names. Very rarely, here and there, do we find a Roman or a Greek name added to an Egyptian. Here we derive our knowledge from the papyri, but mostly from the mummy-labels, which have been studied by Hall in the *P.S.B.A.*, XXVII, pp. 13 ff. I cannot concur in the opinion that the use of a Greek name means necessarily a Greek mixture of blood, and this can be judged from our own days. Egyptians had always the knack of adopting the names of foreigners, by way of fashion, and there is no need whatever to suspect a Greek origin or parentage for an Egyptian who bore a foreign name. Religion was no barrier to this, for we know that the Greeks readily worshipped the Egyptian gods, and Egyptians must have

adopted various other Greek customs ; but intermarriage could not have prevailed to a large extent, and I can prove this from the various anthropological researches on the bodies of that period. According to Hall, *loc. cit.*, the proportion of Greek names to Egyptian is one in four, and one in three. On the other hand, Egyptian names were borne by Greeks or people of Greek descent, and to base arguments on names alone is misleading. It was only about the third century, under Aurelius Caligula, that Egyptians were allowed to bear the names of the Emperors. Almost about the same time the second group of names began to be used.

2. With the advent of Christianity, which was brought in by the Greeks, the Egyptians who became Christians adopted at large, not only Greek and Roman names, but whole phrases and expressions from the Greek language, and forced them into their language, which they began to write in Greek letters. But we know of celebrated Coptic saints who bore foreign names, even before they became Christians. We have the great St. Antonius, and Paul before him, who were both of Egyptian origin and did not know a word of Greek. Amongst the innumerable lists of saints and martyrs we still meet with purely Egyptian pagan names which must have been very dear to the Egyptian, to wit, Harsiesis, Hôr, Petiesi, Harmin, Onnofri, Pakhôme, etc. Biblical names were very common, but not so common as later on. Indeed, towards the fifth and sixth centuries it was impossible to distinguish, by the names alone, the nationality of the bearer. Nevertheless, the various ostraka, papyri, etc., show that amongst the laity names of undoubted Egyptian origin were very common indeed.

3. With the advent of Islam, and after the Arab conquest of Egypt, things began to be changed. Early under the first dynasties of the new rulers there was no active persecution of the Copts, and they began to adopt Arab names (see above, and CRUM, *Catalogue of Coptic MSS. in the British Museum*). Immediately the new conquerors began to persecute the Egyptians, they reverted to their old names ; but, still feeling the hatred of the Greeks, they adopted Biblical names.

4. Under the Fatimid dynasty the Copts saw better days, and a number of well-known personages have shone out. Besides some who occupied the highest posts in the Government, there were others who were great writers in law, philology, medicine, etc. ; those people adopted names of a purely Arabic stamp, and it must have been, first, the clemency of the rulers, and second, the fashion, that made them adopt these names. The best examples that we could give of this group of names is to cite one full name of one of the brothers 'Ibn al Assāl who flourished in these periods. One of them was called 'I Šaiḥ 'I Rais 'bu Ishāḳ ibn 'I Rais Faḥr 'I Dawlat Abū Mufaḍḍal ibn 'I Assāl (الشهيد الرئيس أبو اسحق بن الرئيس فخر الدولة ابو المفضل بن العسال). He was a most copious writer on various subjects—philology, law (ecclesiastical and profane). Those high-sounding titles in Arabic were, however, not long to last. The Copts were soon prevented from using them longer by the very bitter persecutions they suffered from under the Turks and Mameluks.

5. Under the above-mentioned rulers the Copts reverted to their old names, which were a mixture of Arabic and Christian-Greek names, with here and there a few Biblical ones, added to surnames usually denoting son of so and so, or father of so and so. In those times they began to translate many of their old names into Arabic, and used them in their Arabic equivalents. Thus they translated the old name Pshay, ⲡⲩⲩⲁⲓ, into عيد 'Eid ; ⲡⲉⲥⲁⲧⲉ, into نور 'Nour' ; and also Greek names, Antonius into عوض, Theodorus into عطا الله, etc., etc.

6. In our days we can divide up the names into different groups :—

- (a) Purely Egyptian names still in common use, such as Pakhome = *ⲡⲁⲕⲭⲟⲙ*; Bishay = *ⲃⲓⲃⲁⲓ*; Mena = *ⲙⲉⲛⲁ*; Bahman = *ⲃⲁⲕⲙⲁⲛ*; Besa, Wissa = *ⲃⲉⲥⲁ*; Harmin = *ⲭⲁⲣⲙⲓⲛ*; I have even found Hôr = *ⲭⲟⲣ*, and Paesi = *ⲡⲁⲛⲥⲓ*, and Thaesi = *ⲧⲁⲛⲥⲓ*; Nesamon = *ⲛⲉⲥⲁⲙⲟⲛ*; Besada = *ⲃⲉⲥⲁⲧⲉ*; Besenda = *ⲃⲉⲥⲉⲛⲧⲉ*; Shenudah = *ⲃⲉⲛⲟⲩⲧⲉ*; Babnuda = *ⲃⲁⲃⲛⲟⲩⲧⲉ*; Toutou = *ⲧⲟⲩⲧⲟⲩ*; Loula = *ⲙⲟⲩⲗⲁ*, etc., etc.
- (b) Old Greek names, which are very numerous indeed: Butros = Peter; Bulos = Paul; Iskander = Alexander; Giurgius = George; Tadros = Theodorus, etc.
- (c) Purely Arabic names, which may be either translations of old Egyptian or Coptic ones, or of an Arabic origin. They may be theophoric names, always added to the name of Allah, such as Abdallah, Gudallah, Attallah, etc., or denoting the attributes of the Almighty, as Aziz, Latif, etc., which are abbreviations of Abdel Aziz and Abdel Latif. Usually Moslems use the full name, and Copts only the attribute. The Copts, as has been said above, have been very careful not to use any name of the Prophet Mohammed, *ⲙⲉⲃⲉ*, or any of the derivatives of the word; nor any name of his family, such as Hasan, Husein, Aly, Othman, or Fatmah, Zenab, Aisha, etc.
- (d) Mixture of Turkish names and Arabic names, such as all attributes in the form "f'ly" (*ⲫⲉⲗⲓ*), Sobhy, Turkish for Sâbiḥ in Arabic; Fahmy, Turkish of Fahîm, and so forth, as Noşhy and Nōṣiḥ, Fikry and Fakkir, Sirry and Sarîr. We often find these forms added to purely Christian names, such as Girgis and Tadros and Butros, or to Biblical names, such as Ibrahim = Abraham, Yusif = Joseph, Ishāk = Isaac, or even Hazqial = Ezekiel, and Armiah = Jeremiah, etc.
- (e) European names added to Arabic, or to Turkish, or even to ancient names of an Egyptian origin. Of Latin names the commonest are Louis, Antoun, Francis, etc., for men, and Louise, Bella—short of Isabella—etc.; and of English we have from William, Edward, Albert, Herbert, Wilson, Charles, Robert, down to Dickson, Kitchener, even Allenby and Nelson, for men, and from Laura, Lily, Daisy, Eva, Nelly, to Hortense, Edith, Elizabeth, Victoria, Georgette or Georgina, for women.

Thus in the above outline of Coptic names we can easily follow the historical changes in their use, and one can orient himself in a historical sense when faced with any name of the above-mentioned groups.

G. P. G. SOBHY.

JUSTICE AND REVENUE.

Experts	571-582	Other Courts	669-682
Scribes	583-591	Procedure	683-691
Secretaries	592-598	Judges.....	692-716
Orders.....	599-608	Declarations	717-734
Judgments	609-617	Registers, records	738-762
Laws	618-621	Police, prisons ..	763-767
Justices	622-627	Treasury	768-803
Court of Six	628-647	Accounts	804-811
Court of Thirty ..	648-668	Tribute	813-819

In the management of a country there will always be hard cases and difficult questions, which are above the scope of petty officials, who can only carry on by fixed rules. For these matters there was a special staff of experts (571), *sehez*, "making clear"; these were organized as a body of referees, as there was a *sehez sehezu* (572), implying that they were not under the authority of the department which they understood, but acted as independently responsible. These experts were attached to the Council of Upper Egypt (573), to the sealers (574), to the country districts, the councils of the *qenbet* (575), and to the Private Secretariate (576). Sometimes a judge, *sāb*, was an expert where legal training was required, as for secrets (577), for scribes (578), for the scribe of royal documents (579) and for issuing proclamations or public orders (580). There is also named an expert of the register (581) to settle questions of domicile, and an expert of boats (582), the beginning of an Admiralty court.

There were various scribes attached to important affairs, as (583) the "scribe of the books of Horus the strong bull" (the king), and the "scribe of the place of letters" (584) or the archives of correspondence. One true bureaucrat calls himself "scribe of the letters of the office of elders of the king, as is done for official papers in Memphis, place of the throne of the king, in all seats of the scribes," a regular Chancery formula (585). There was an intendant of the royal documents (586), a scribe of documents of the king in the presence (587), a leader or manager of the documents of the South (588), and an intendant controller of the scribes of

References :—B.B.E., Brugsch, Berlin Erklärung. B.Rec., Brugsch, Recueil. B.W., Brugsch, Wörterbuch. C.I., Cat. Inscip., de Morgan. C.R.T., Capart, Rue des Tombeaux. E.E., Maspero, Études Eg. E.G., Erman Grapow, Handwörterb. H.B., Holmerd and Boeser, Rijks museum. L.E., Denk., Ergänzungsband. L.A.E., Lepsius, Alt-Eg. Elle. L.J., Lisht, Jéquier. M.C.A., Mariette, Cat. Abydos. M.K., Mariette, Karnak. Mon. D., Monuments Divers. Mun.A(ntiquarium). N.Ber., Newberry, Bersheh. P.Ab., Papyrus, Abbott. P.B., Paris Bibliothèque. P.Har., Papyrus, Harris. P.N., Petrie, Naqada. P.P., Pirie Paget, Ptah-hetep. Q.H., Quibell, Hierakonpolis. Q.S., Quibell, Excavations at Saqqara. R.M.H., Rosellini, Mon. Hist. S.I., Sharpe, Inscriptions. T.W., Petrie, Tools and Weapons. VAT(ican). W.D., Weill, Décrets. WR., Wreszinski, Atlas. Also the previous lists in Ancient Egypt, 1924, pp. 112-113; 1925, p. 13.

documents (589). A librarian of the king is named (590), *thā* for *thāy*, and one "over the replies" (591). Beside the scribes, who were writing to order, there were many special secretaries, who had probably a good deal of initiative, like our Secretaries of State. For the royal ceremonies there was a secretary of the king's consecration chapel, *duat* (592), a secretary for private interviews (593), a secretary for private hearings (594), a secretary for hearing made alone in the harem (595), a secretary of secrets (596), a secretary of secret speech (597), and a secretary of all secret speech brought from the nomes (598) or reports of spies in the country.

Connected with the old titles "orderer of Nekhen" or of "Pe," *rā*, there appears a controller of all ordering (599), and a judge controller of ordering (600). There are various officials connected with the orders, *uz*, of the king, as an intendant of all the king's orders (601), and of all secret orders of the king (602), an intendant of royal scribes of all spoken orders of the king (603). The earliest of such titles is a secretary (?) of orders (604) in the first dynasty. Nefermaot at Meydum was commander of all the lords, *saru* (605). A very high noble, Methen, was "possessor of the word" (606), probably acting in the king's name, having the king's word for all he did. There was a scribe of commands (607), and a bearer of all words of the king (608), taking orders direct at court.

A very important class of offices belong to judging, *uzo medu*, "dividing words." This was the function of the High Court of Middle Egypt, but never of the king. After the title alone, "divider of words" (609), there is given the name of the court, the *hāyt* abbreviated (610); another court of judgement was the *usekht* in 613. Two general titles are scribe of the controller of judgement (611) and intendant of all judgements (612). There are secretaries of the judgements (614), and of the judgements in yet a third court, the great Court of Middle Egypt (615-6-7), 616 being for secret orders, *me lu shetā*.

The laws, *hepu*, are not so often named. They were in the king's charge in his court of the *seh* hall, as in 618, "the intendant of the laws of the good god in the *seh* hall of true judgement." The great vezier Mentuhetep was a "giver of laws" (619), and there are later titles of the intendant of laws and establisher of laws (620-1).


The earliest great title was Controller of the Interior (622) in the Ist dynasty. Rather later the highest official was the head of the royal court of justice, of which the sign was the great gate with a cornice of uraei, the emblem of the royal power of death. He usually was also professionally a judge, *sāb*, and the *thāt* or vezier (623). The latter is derived from the view that he was the husband of the country (624). He had also often the old title of "orderer of Nekhen" the primitive capital (625-6). Later the vezierate was separated, and the Chief Justice was only *heretep* . . . "over the court" (627).

The court most often named was the great Court of Six. Whether this refers to six judges in a great court, or in six separate courts, is not quite certain. Erman and Brugsch take the latter view. In favour of six judges forming one court, there was one secretary of judgements and of secrets (640-1) for the six, there was a great one of the Court of Six (637), and there was an "intendant of the six of the great court" (645). There does not seem any reason for six separate courts being all together; while from there being a great Court of Thirty, divided in tens, for Upper Egypt, it is likely that the great Court of Middle Egypt would also be composed of a bench of judges. This court was held at the capital of the XIIth dynasty, Lisht, Athet-taui (628). The six judges would probably represent the

571	የ	V D.E.H. VII, XII	፳፻፲፭	609	ሐሳ	M.M. D 56	፳፻፲፭
572	የ	XI L.D. II, 149 c.e.	፳፻፲፭	610	ሐሳ	L.D. II, 43 c	፳፻፲፭
573	የ	V M.M. D 19	፳፻፲፭	611	ሐሳ	M.M. H 3	፳፻፲፭
574	የ	OK M.M. G n	፳፻፲፭	612	ሐሳ	V D.P. II, VI	፳፻፲፭
575	የ	XI L.D. II, 149 c.e.	፳፻፲፭	613	ሐሳ	V S.M. I, XVIII	፳፻፲፭
576	የ	M.M. C 10	፳፻፲፭	614	ሐሳ	IV, V L.D. II, 84	፳፻፲፭
577	ሐሳ	M.M. C 10	"	615	ሐሳ	M.M. E. 17	፳፻፲፭
578	ሐሳ	V L.D. II, 46-7	፳፻፲፭	616	ሐሳ	M.M. D. 1	፳፻፲፭
579	ሐሳ	V M.M. D 15	፳፻፲፭	617	ሐሳ	B.A. 304	N.N.
580	ሐሳ	V L.D. II, 43 c.d	፳፻፲፭	618	ሐሳ	XIX B.T. V, 950	፳፻፲፭
581	የ	V L.D. II, 54	፳፻፲፭	619	ሐሳ	M.K. C. 20539	፳፻፲፭
582	የ	IV-V L.D. II, 100 b	፳፻፲፭	620	ሐሳ	B.A. 302	N.N.
583	ሐሳ	XXII P.H.	N.N.	621	ሐሳ	B.A. 302	N.N.
584	ሐሳ	XXI P.J.	N.N.	622	ሐሳ	I RT. I, XXI, 27	N.N.
585	ሐሳ	BER. 1397	፳፻፲፭	623	ሐሳ	III P.M.	፳፻፲፭
586	ሐሳ	XII N-BER. II, 15	፳፻፲፭	624	ሐሳ	IV L.D. II, 15 a	፳፻፲፭
587	ሐሳ	V L.D. II, 46	፳፻፲፭	625	ሐሳ	D.M. 539	፳፻፲፭
588	ሐሳ	XII N-BER. II, 15	፳፻፲፭	626	ሐሳ	N.D. 45	N.N.
589	ሐሳ	V M.M. D 14, 19	፳፻፲፭	627	ሐሳ	VI A.S. XV, 212	፳፻፲፭
590	ሐሳ	LN, V, 1	፳፻፲፭	628	ሐሳ	B.M. 255	፳፻፲፭
591	ሐሳ	BER. 1406	፳፻፲፭	629	ሐሳ	V. S. U. 1, 87	፳፻፲፭
592	ሐሳ	IV. L.D. II, 30	፳፻፲፭	630	ሐሳ	M.A.F. 1, 202	፳፻፲፭
593	ሐሳ	VI. B.G.	፳፻፲፭	631	ሐሳ	B.M. 1272	፳፻፲፭
594	ሐሳ	XII, M.D. 19	፳፻፲፭	632	ሐሳ	V S.M. 1, 7	፳፻፲፭
595	ሐሳ	XXVII L. 1056	፳፻፲፭	633	ሐሳ	V. L.D. II, 43 b	፳፻፲፭
596	ሐሳ	M.M. D 42	፳፻፲፭	634	ሐሳ	XI L.D. II, 149, c.e.	፳፻፲፭
597	ሐሳ	M.M. D 41	፳፻፲፭	635	ሐሳ	XII C. I. 26, 186	፳፻፲፭
598	ሐሳ	RD. XI, 1	፳፻፲፭	636	ሐሳ	XII L. J. V. 99	፳፻፲፭
599	ሐሳ	M.M. D 11	፳፻፲፭	637	ሐሳ	XVIII, N-R.	፳፻፲፭
600	ሐሳ	M.M. E 10	፳፻፲፭	638	ሐሳ	XII N-BER. II, 15	፳፻፲፭
601	ሐሳ	VI. B.G.	፳፻፲፭	639	ሐሳ	XVIII	፳፻፲፭
602	ሐሳ	VI. GR. T. 17-26	፳፻፲፭	640	ሐሳ	B.A. 306	N.N.
603	ሐሳ	M.M. D 9	፳፻፲፭	641	ሐሳ	D.M. 523	፳፻፲፭
604	ሐሳ	end I RT. I, XXX	፳፻፲፭	642	ሐሳ	V. L.D. II, 64	፳፻፲፭
605	ሐሳ	D.M. 523	፳፻፲፭	643	ሐሳ	IV, V L.D. II, 84	፳፻፲፭
606	ሐሳ	III L.D. II, 3, 5, 7	፳፻፲፭	644	ሐሳ	M.M. E 8	፳፻፲፭
607	ሐሳ	M.K. C. 20059	፳፻፲፭	645	ሐሳ	XVIII L.R. 337	፳፻፲፭
608	ሐሳ	V L.D. II, 43 d	፳፻፲፭	646	ሐሳ	XVIII A.S. VII, 235	፳፻፲፭
				647	ሐሳ	MEIR, IV, xv.	፳፻፲፭


six nomes of Middle Egypt; the full list has seven nomes below Hermopolis, which was the gate of the Thebaid, but Nilopolis was separated later than the XIIth dynasty. The vezier Merruka was in the great Court of Six, commanding the *saru*, lords (629); from this it seems that the court consisted of the six lords of the six nomes. This court gave judgements, *uzo medu* (630); and the vezier was "making just judgement in the great court" (631). The judge, orderer of Nekhen, was of this court (632). The great vezier Amenemhet—later king—was leader of the great court (634). In the XVIIIth dynasty it was called the *oñ* great, instead of *ur* great (636). The great Rekhmara was mayor of the Court of Six (637). There was a secretary of the judgements (641), and another of the secret words (642) or private debate, of the court. There were scribes of the court with a controller (644). In the VIth dynasty a viceroy was in the great court, perhaps to add representation of Memphis (647).

In the South there was the council of the thirty mayors (*ur*). The title *ur*, great, does not refer to the head of the council, as seven veziers who were concerned with the council were none of them *ur res mobdyt* (649); each councillor was a mayor, *ur*. The function of the veziers was to be controller of the mayors (660-3). From Hermopolis southward there were fifteen nomes, and so the council of thirty were apparently two from each nome. A curious late title is "Leader going at the side of the thirty" (651), apparently an outside chairman. The "Hearer of the thirty" (652) was no subordinate, but one of the greatest veziers, who made laws; this implies that he was gracious to them, hearing their representations. The bald title "over the thirty" (653) was also held by a high priest of Hermopolis (silver ring, U.C.); it points to a lower prestige, when they were dominated. Beside the thirty we find references to a southern twenty (654-5), and a southern ten (656-63), and also a northern ten (667-8). The latter overlaps the period of the Court of Six and cannot therefore mean ten outside of the region of the thirty; also it was a title of the prince of Hermopolis at the north end of the thirty. Thus it seems that the thirty were subdivided, from beginning to end of history, into three groups of ten, the north ten Hermopolis to Hypselis, and the south twenty in two groups of (a) Aphroditopolis to Dendera, and (b) Koptos to Elephantine, the break being between three western nomes and three eastern. Each of these groups had obvious capitals, Siut, Abydos and Thebes. This accords with the "orderer of Nekhen" being one of the mayors of the south twenty (654). There is one mayor (658) who was, *uo*, supreme, in the house of the ten; this is in the XIXth dynasty, and shows a domination of the council like the later *her*, "over the thirty." The members of the court are figured by a man with a staff, which sign is known both for *sar* and for *semsu*, elder (648, 665, 6, 8); by their importance they were probably *saru*, lords, like the great Council of Six. The title "mayor in the house of *saru*" (666) probably refers to the thirty.

It should be observed that these councils of six and of thirty were judicial and deliberative, but they were not legislative, as there is no *upt*, declaration, or  document, or letter. A high judge, *uzo medu*, and orders, *medu*, and *sāb*, judges, belong to the Court of Six, and orders to the Court of Thirty. [In *Names and Titles*, xxxv, the "*sāb er Nekhen ne hat ur*" should read "*sāb rekhi ne hat ur*."]

Some light on these courts is given by seeing what offices are associated with them by a single individual. The Court of Six had three royal sealers and three heads over Nekheb, never held by one of the thirty court. The South Court of Thirty had thirteen royal deputies (*tep kher*), thirteen judges conservators of the

river, nine *nes khenti*, seven priests of Neit, eight secretaries of king's orders, six controllers of scribe of requests, five over land of house of life, and orderers of the land, four intendants of the *usekht* court, priests of pyramids, and intendants of declarations, while all these offices were rarely, if ever, held by one of the Court of Six. There was thus much more extensive administration carried on by the South court than by that of the North; probably more was done by direct action of the king and heads of departments at the palace in the North, but certainly the South court officials carried on a large amount of business.

The *tât* was a general name for a law court in any important place, as the *tât* of South and North (669), of the capital (670) or of the land (671). This was also the name of the High Court with the cornice of uraei, known as the "great *tât*" (672). The *tât* courts were organized under one administration, as there was a central management of accounts (or of bondmen) named by a scribe (669). This sign  has here two possible meanings, as in 672 there is "over the scribes of the beings enrolled for the great *tât*"; *au hesb* here (672) meaning "bondmen." If the *tât* had therefore a *corvée* staff, this points to being the authority for canals and irrigation work.

The *qenbet* was another court, of local origin in various places, the members of which were probably the notables of the town. Apparently from among these, representatives met under the vezier, as forming the great *qenbet*. The term is literally the "corner" man, and suggests that they came from the outlying corners of the nomes, as stated in 673, a "*qenbet* of the *u* land," or agricultural region. There was also a *qenbet* of a temple to deal with agricultural rights (Hepzefa III). They were thus very different from the great men of the cities, the mayors and *saru* lords. In the great *qenbet* they attended to inheritance of land, and sent a *qenbeti* to divide property. The registers of past taxation and ownership were produced before the vezier in the great *qenbet* (ALAN GARDINER, *Inscription of Mes*). The court met in the judgement hall of Pharaoh. The great *qenbet* of the North met at Heliopolis, that of the South at Thebes. The choice of Heliopolis suggests that it was a prehistoric court of the old principate there. There was a head man (674) of the local *qenbet*, and an expert of the *qenbetu* (675). In Thebes we read of a follower of the *qenbet* (676), probably to attend to enforcing the decisions of the great *qenbet*.

The *orryt* was another office, of which there was an intendant (677-8), a legate (679), and a follower (680). There was a town near Beni Hasan named Oryt, where Hathor was worshipped (B. Bh. II, 27); *orryt* or *oryt* is a "tower," and *ort* a "book roll." Putting these together it looks as if *oryt* was the record-office of a nome, the *oryt* where the *ort* were kept. This happened to be a shrine of Hathor in one place; the officials were caretakers, *mer*, a legate to inspect the system, and a field-man, *shemsu*, to collect the documents. There is no suggestion of an acting body of people. Two other expressions for legal courts are the "place of justice," *bu mât* (681) and the "hall of justice" (682).

To sum up the conclusions about these various courts. The king sat in the *usekht* hall (73), in the *seh* hall (618), and with the *zazat* council (M.M. B 16); as he legislated, but did not judge, these were for *hepu*, laws. The Court of Six was under the vezier (629, 634, 5, 6, 8, 9), and similarly the Court of Thirty (648, 51, 57, 58, 61, 62, 66), giving *uzo medu*, judgements on cases. The *hayt* court was that of elders (*semsu*, see G.W.T. 147; A.S. xvii, 92), and was probably a local court like the modern *meglîs*. The *tât* courts managed the *corvée* for public works (669, 672), probably local courts (669-71), with the great *tât* (672) over them.

Similarly the *genbet* courts were local courts, with a great *genbet* over them, for land laws and inheritance; hence the large estates of the temples needed a *genbet* of the temple to manage them, and to be trustee for endowments from land. The *orriy* was the record office of the nome, where the *ort* were kept.

Some officials are named in the procedure. There were "clerks of requests," *sesh speru* (683); such were under a controller (684), and supervised by an expert (685). After the plaintiff had his process stated, there was a hearer who sat in the *usekht* hall (687), who only sometimes acted alone, "hearer of hearings alone" (688-9), and therefore more usually jointly. The phrase "hearing of calls to him" may be merely proof of condescension, or be a legal term for opening cases. *Sedem* "hearing" was evidently a legal term, as there is one "great in hearing," and a scribe of hearing (691-2).

The *sāb*, jackal, was the usual title for a learned man, not necessarily legal, as he filled many kinds of offices, including at first the maintenance of the waterways (692). The origin of using the sign of a jackal is suggested by the same sign having the meaning of traversing or pulling through difficulties. As the jackal works out the best track through the unexpected intricacies of desert valleys, so a judge has to find a clear track through the unexpected pitfalls of a case. Anyone who has walked the desert knows the immense detours needed to pass the head of valleys, and the bar of unexpected ravines, fit emblems of legal troubles, where only the guidance of the jackal track can show the way.

The examples of the title are placed together to show how varied were the functions of a *sāb*. There is the conservancy of waterways (692), especially of the southern throne (693); the orderer of Nekhen (694-5), judge in the Council of Thirty (696), in the southern cities (697), as an elder of the *hayt* hall (698), and hearing hearings, or taking depositions, there (699). The judges sat in the Treasury of the Aten (700), perhaps owing to insufficient official quarters in the new capital. A *sāb* was a general of archers (701), another in the place (702), or in the private chamber (*qāt uo*) of the king (703), or filling the heart of the king (704), or over the orders of the king (705); another was attached to the high-priestess (706), or to the decoration of the tomb, the "house of gold" (707). The *sāb* had authority as declaring affairs (708), as orderer (709), or strong of speech (710); he was an "expert, scribe of justice" (711, 714), or skilful scribe (713). Judges also gave opinions in writing (715). The bare title *sāb* (716) is very usual down to the end.

We now turn to the work of Justice, and the first term to notice is *upt* (717). As this word, like many others, has been variously translated—judgment, message, order, or business—we must look for its real definition. It does not occur in the titles belonging to the Court of Six, or the Court of Thirty, nor the *tāt* hall, nor with any experts, nor council (*zāzāl*); in only one case was an *upt* issued by a judge, and a judge named with *upt* is one that decides about its meaning, but not ordering it. The place where *upt* appears is in the heading of records (Sinai) *nesut upt* (717-8), and the name for the census list of a household which had to be declared to the court. Thus it seems entirely clear of judging or deciding a matter. It appears to mean an official declaration or notification; thus it was like a legal declaration now, apart from any matter of justice or dispute. The term "declaration" will best agree with this, and also cover any cases (if such can be found) where it involves a decision on a question. In Sinai the official decrees for the expeditions are headed *upt* (717) or, "declaration of Horus lord of the palace" (718). There was an intendant of all declarations by the king (719-20)

or of the palace (721); or over the declarations in the land to its limits (722), or to both lands (723), or in the nine nomes (724), probably from Memphis to Siut, or in nomes separately (725-6-7). In one case there were declarations by a judge (730); one was over declarations of secret things (731), or of Justice (732); the declarer of truth (735) was probably the one who had to pronounce the verdict, by turning his figure of Māot toward the acquitted party. The secretary of clear voicing (736) was perhaps for public proclamation.

Registration was all-important in Egypt, down to every infant. Registers of persons served to distinguish freemen from slaves, as by the "intendant of the things sealed" (737). The usual sign for a register is the roll of papyrus tied up, or a bundle of rolls. This sign has had many renderings, but essentially it is a register, or applied to registered things or persons, or a registrar or registry. It is most clearly defined by the title of the great vezier Mentuhetep, "establishing the registers of the boundary (*tāshā*) of land, declaring the assignment (*kherpet*) as far as his neighbour" (738). The earliest figure is of a bundle of rolls, the register of food in the North office (739). The green colour points to the vegetable origin, like green rope signs, though they were in use certainly brown. A general in the Ist dynasty (Sin. Ib) and the great prince Rahetep, were registrars of the *saru*, or the elders (748), also intendants of the registers (741). There were controllers (742), or overseers (743), or chiefs of registers (745). The king's registry is named (744, 746). A man was said to be "entered in the registry" (747). There was an intendant of the double registry of documents under the king's seal (748), and an intendant of the registry of executions (?) (749). People were "in the register" (750, 752, 753); a keeper of the registry appears (751), and even a tomb was known as a registered place, like our word billet meaning a position to be occupied, though literally the paper order for it (see 754, 755), "building his registered place, raising his tomb." Other documentary titles were of one "in the place of documents" (756), keeper of documents (757), and one "over the declarations" (758) (see *yā*, "certainly, assuredly"). There is a group of officials of the *deqernu*, which seems to be equal to the Hebrew דִּקְרֻן *dekerun* "records." This is twice found in the Vth dynasty, so it is an original Semitism, and not late. There was an intendant of the office of records (759), an inspector, a keeper and a servant (*ahems*) of the office (760-2).

The intendants of police are named in 763-4, *khu* "to protect," implying police or guards. Scribes of the prison or "lock-up" appear in 765-6; and a mayor of the prison, later, in 767.

The treasury was always an important department, yet it was not held by more than half the early veziers, and scarcely by any later veziers. There are few officials named, and never any secretary, till one in the XIXth dynasty. Thus there was but little correspondence, the department being simply for storage of precious metals. The titles are not fully determined; Maspero took the *per hez*, or white house, to mean any plastered government office; on the other hand, silver is now read simply as *hez*, with the *nub* sign as determinative of precious metal. Hence the *per hez* may well mean the store of silver. When a high official, or a vezier, is called intendant of the *perui hez*, it is clearly an important office, and should be taken as the silver treasury; this covers many other cases. There is one possibility, that the treasury was always built of stone, to prevent burglary, and hence that the white stone house had this meaning, in contrast to other houses of brick. Sometimes there is the double house of gold (768-9), doubled for Upper and Lower Egypt. The two *per hez* in 771 should refer to silver, as the double house

737	ጽሑፍ ደንብ XIX. B. A. 254	N. N.	778	ጽሑፍ ጽሑፍ	M. M. D 25	ጽሑፍ
738	ጽሑፍ ደንብ ጽሑፍ		779	ጽሑፍ ደንብ	P. S. 20-147	ጽሑፍ
739	ጽሑፍ ደንብ	M. K. C. 20539	780	ጽሑፍ	SIN. 28	ጽሑፍ
740	ጽሑፍ	II RT II, XXIII 191-3	781	ጽሑፍ	SIN. 25	ጽሑፍ
741	ጽሑፍ	III P. M. XIII	782	ጽሑፍ	M. M. F I	ጽሑፍ
742	ጽሑፍ	III P. M. IX, XII	783	ጽሑፍ	E. E. 248	ጽሑፍ
743	ጽሑፍ	V L. D. II, 54	784	ጽሑፍ	P. S. 298	ጽሑፍ
744	ጽሑፍ	XIX G. N. T. 216	785	ጽሑፍ	ጽሑፍ	ጽሑፍ
745	ጽሑፍ	M. M. D. 25	786	ጽሑፍ	V. M. M. D. 6	ጽሑፍ
746	ጽሑፍ	VI D. G. I, XVII	787	ጽሑፍ	B. M.	ጽሑፍ
747	ጽሑፍ	W. D. 19	788	ጽሑፍ	C. L. 512	ጽሑፍ
748	ጽሑፍ	S. U. I, 135	789	ጽሑፍ	VI A. S. XV, 214	ጽሑፍ
749	ጽሑፍ	M. M. D. 19	790	ጽሑፍ	XIX B. REC II, 74	ጽሑፍ
750	ጽሑፍ	M. M. D. 6	791	ጽሑፍ	V S. M. I, VII	ጽሑፍ
751	ጽሑፍ	IV L. D. II, 15a, b	792	ጽሑፍ	SIN. 85	ጽሑፍ
752	ጽሑፍ	D. M. 527	793	ጽሑፍ	A. S. VIII, 65	ጽሑፍ
753	ጽሑፍ	XIX REC X, 130	794	ጽሑፍ	M. M. D. 25	ጽሑፍ
754	ጽሑፍ	XX D. 25339	795	ጽሑፍ	P. G. VII A	ጽሑፍ
755	ጽሑፍ	COMMON PHRASE	796	ጽሑፍ	E. E. 248	ጽሑፍ
756	ጽሑፍ	Ro. B. A. 222	797	ጽሑፍ	M. M. D. II	ጽሑፍ
757	ጽሑፍ	L. N. 82	798	ጽሑፍ	I RT. XXIII 40	ጽሑፍ
758	ጽሑፍ	XIX B. M. 703	799	ጽሑፍ	M. K. C. 20399	ጽሑፍ
759	ጽሑፍ	V. 118	800	ጽሑፍ	SIN. 112	ጽሑፍ
760	ጽሑፍ	MUN. A. 24	801	ጽሑፍ	NICHOLSON STELE	ጽሑፍ
761	ጽሑፍ	M. K. V. 72	802	ጽሑፍ	M. K. C. 20079	ጽሑፍ
762	ጽሑፍ	1414	803	ጽሑፍ	M. K. C. 20080	ጽሑፍ
763	ጽሑፍ	XII N. B. H. I, 16	804	ጽሑፍ	XVIII P. S. CONE 74	ጽሑፍ
764	ጽሑፍ	VI A. S. XII, 97	805	ጽሑፍ	XIX, ST. 25	ጽሑፍ
765	ጽሑፍ	M. K. C. 20322	806	ጽሑፍ	A. S. VI, 91	ጽሑፍ
766	ጽሑፍ	M. K. C. 20476	807	ጽሑፍ	B. M. 826	ጽሑፍ
767	ጽሑፍ	XVIII L. R. 56	808	ጽሑፍ	S. I. II, 1, 21	ጽሑፍ
768	ጽሑፍ	V S. M. VIII	809	ጽሑፍ	P. 26	ጽሑፍ
769	ጽሑፍ	XVIII N. R.	810	ጽሑፍ	XVIII S. B. A. XXI 32	ጽሑፍ
770	ጽሑፍ	V. L. D. II, 45-8	811	ጽሑፍ	XXVI, A. S. IV, 183	ጽሑፍ
771	ጽሑፍ		812	ጽሑፍ	VI MEIR IV, XV	ጽሑፍ
772	ጽሑፍ	XVIII S. B. A. 1899, 103	813	ጽሑፍ	II RT. II, XXII, 184	ጽሑፍ
773	ጽሑፍ	XII REC X, 144	814	ጽሑፍ	II RT. II, XXII 181	ጽሑፍ
774	ጽሑፍ	XXII P. H.	815	ጽሑፍ	P. S. 286	ጽሑፍ
775	ጽሑፍ	B. M. STAT. 603	816	ጽሑፍ	XXII P. H.	ጽሑፍ
776	ጽሑፍ	P. J. 465	817	ጽሑፍ	XXII P. H.	ጽሑፍ
777	ጽሑፍ	B. M. 212	818	ጽሑፍ	B. M.	ጽሑፍ
			819	ጽሑፍ	B. M.	ጽሑፍ

of gold follows. If so, 770, 772 will refer to silver, yet in 774 *perui hez* simply means treasury, as it follows "of silver (*nub det.*) and gold." In 775 the question arises, when the two signs were united, if the alloy of silver and gold, or electrum, is intended. In 776 gold is named before silver, and there can be no doubt about both metals. In 777-9 the diwan of the treasury is named, the clerk's office. An elder (780) and a keeper (781) appear. The palace intendant of the storehouse, or strong room, for gold, is named (782), and the expert about things of the treasury (783), also a scribe (784). The administrator of the western treasury of the palace shows that a separate treasury was on the western side (785). The depot, *khä*, of gold of the king seems separate from the official treasury (786). The gold for the room of gold implies the store for the gilding of the tomb (787), and the same is implied by the treasury of the Duat (788). Secretary and scribes of the treasury are often named (790-1-2). A counter or reckoner of the treasury was employed to tally the amounts (793), and a junior was "in the following of the treasury" (794). An unusual title is "orderer of things for the treasury" (795). A curious idiom in 796-7 is "under making sound," fit, or healthy, similar to our "*undertaking*"; perhaps the nearest equivalent would be "organizer." A helper, *kher-o*, in the treasury of Sez-hetep in the Ist dynasty is the earliest treasury title (798). In 799 is a rare title, "the careful sealer of the treasury" (*khetmu kefä ab*), parallel to a "careful sealer controller of works" (Vienna 31). The guard is written phonetically, *säu*, in 800. There were special boats and crews belonging to the treasury, for conveyance of valuables; a sailor of the department has left a stele (801), and a guarded ship brought washed gold from Nubia (B.A. 242).

Accounts were the principal care of clerks, as seen in the long lists of farm property stated in the tombs, and the summaries of booty from the wars, whether of the Ist or the XVIIIth dynasty. The idea of complete registration and record seemed a first principle to the Egyptian mind. There is only one grade of accountant of the treasury (802). Of accounting in general there is an expert keeper of accounts (803), a scribe of accounts of the king (804), a scribe of accounts of silver and gold of the king in the South and North (805), and a scribe of royal accounts (806). The day-book system was separate, as there is a scribe of accounts every day in South and North (807), and a royal scribe of daily accounts (808). Another scribe was an able chief accountant (809). A control of the temples is shown by an intendant of the reckoning of the temple accounts (810), and the form of the word *räu per* suggests that the temple was so called as "the house of words," of the service of the god. The queen had a secretary of accounts of the pure place (817). A noble's establishment employed two or three men entitled "expert orderer of things," a sort of handy man to tidy up affairs (812).

The tribute from abroad was always an important aid to the country, and in decadent times the poor produce of the oases was ironically called a blessing. In the IIInd dynasty the sealer of the tribute of the North is named (813), and also the tribute of the Asiatics (814). Later there is a manager of the tribute (815), and the list at the close of the empire names a scribe of the increase (816), and an expert scribe of increase (817), the increase being reaped as taxes for the king. An over-keeper of the balance, and a keeper of the *mokhu* balance (818, 819), were the people who had to verify all the tribute, as is often represented in the XVIIIth dynasty.

REVIEWS.

Hermetica. By WALTER SCOTT. Vol. I. 8vo. 549 pp. 1924. (Oxford, Clarendon Press.) 30s.

At last we have a critical edition of "the ancient Greek and Latin writings which contain religious or philosophical teachings ascribed to Hermes Trismegistus," as the full title states. The present volume is to be followed by vols. II and III of Commentary, and vol. IV of Testimonia, Appendices and Indices. The state of the text is unhappy, as the MSS. of one half are all derived from a single late Byzantine MS. (the Asclepius in Latin depends on a single archetype, which was corrupt) and the remainder is built up out of extracts made by John of Stobi, which need extensive critical rearrangement, so that page after page is cut up by transpositions. No doubt the Commentary of the next two volumes will give the reasoned method which has led the present editor. Throughout there is the Greek or Latin original on the left page, and a translation opposite to it, while abundant footnotes give various readings and notes. For all this, students will be thankful.

The most important question about these writings is the date of their original composition, as on that turns their relation to the history of ideas, before or after Christianity. This date is placed by Prof. Scott certainly after the 1st cent. A.D., and mostly between 200 and 310 A.D. The ground for this is the assumption that these works are Greek productions, that they contain dogmas derived from Greek philosophy, and show a mixture of Stoic physics and Platonism. But all the imagery of these works is Egyptian, and Libellus XVI states "the style is obscure . . . and it will be thought still more obscure in time to come, when the Greeks think fit to translate these writings from our tongue into theirs. Translation will greatly distort the sense of the writings. . . . In our native [Egyptian] language the teaching conveys its meaning clearly. . . . When the Egyptian words are spoken, the force of the things signified works in them. . . . Keep the teaching untranslated . . . that the Greek mode of speech with its arrogance and feebleness and showy tricks of style may not reduce to impotence the impressive strength of the language. . . . The speech of the Greeks is devoid of power to convince; and the Greek philosophy is nothing but a noise of talk." Yet we are asked to assume that this was composed in Greek, based upon Platonism, and is to be judged by the history of Greek philosophy. So far as there is common ground between the Hermetic writers and Plato, there is nothing to prove that Plato's residence at Heliopolis, to learn from Egyptian philosophers, is not the connecting link of these documents with Greece. Further, this particular treatise is addressed to an Egyptian king, Ammon, and there was no native king following the Egyptian religion since Nekht-hor-heb, "the approved of Ammon," and he was six centuries before the date desired by Prof. Scott. Can we imagine anyone reviving the idea of such a dialogue after all the changes of Ptolemaic and Roman rule?

It has been pointed out, many years ago, that there are several definite historical marks in these works. Only one of these is discussed by Prof. Scott, the celebrated passage about the destruction of Egyptian worships and despoiling

the country. This he endeavours to fix to the Palmyrene invasion of Egypt, 269-271 A.D. Yet no explanation can be given of the definite terms "Scythian" and "Indian" for invaders, and the papyri—which abound in that century—show no trace of a violent suppression of the religion. As for danger to it from Christians, they had been slaughtered and forced to apostatize wholesale a few years before, from Decius to Valerian, and were after that in a state of violent disruption, so that no obvious danger would come from them. But when we refer this description to the only history with which it agrees, the Persian attack under Ochus, 342-339 B.C., the explanation is complete. The Indians and Scythians were regular troops in the Persian army and have left their effigies in Egypt; Ochus killed the Sacred Apis and placed an ass to be worshipped in the Temple of Ptah; the other sacred animals were killed, the temples looted, the walls of the cities destroyed, and every Egyptian who held to the native rule was slain.

This is only one of the data. There is elsewhere the statement that speech, as an image of mind, is "the same in Egypt, Persia and Greece." Could any one sum up the civilised languages in that way in the close of the IIIrd century A.D., when Rome had long been dominant? Again, there is the reference to a good satrap being sent to govern a conquered province; who would write that, when no satrap had been seen in the West for many centuries? That allusion has an exact historic foundation at 518 B.C. under Cyrus.

Beside such definite historic landmarks, there is the general question of ideas, on which Prof. Scott relies by trusting to their development in Greece. There is the gradual growth of the Logos doctrine; according to the historic detail, about 350 B.C. Logos is the human soul; in 330 B.C. Logos is Reason to be adored; next, Logos makes all things; then Logos is divine indwelling by the Son of God; in 40 B.C. Logos is the first-born Son who made all things, and by the end of the Ist century A.D. the gospel states that the Logos was God and all things were made by him. Can we suppose that the first stages here were all much later than the last, and came centuries after Philo and St. John?

Further, Prof. Scott is emphatic that there is no trace of Christian influence on the Hermetic books, but, if anything, that Christian teaching was borrowed from the Hermetics. There is also no trace of Rome or Roman civilisation or law, but, on the contrary, a recognition of the civilisation of Persia. There is animal worship in full force, in the Hermetics, and it is given as "the reason why the cities of Egypt are wont to make war on one another." Yet animal worship had greatly decayed, and Isis and Horus were the main deities of the Roman age; moreover, no such religious feuds between cities had then occurred for some centuries. Again, there is noted an absence of all ritual and sacramentalism, the religious ideas were in a plastic and vivid state, while under Rome all was decadent and formalised.

As early as Plutarch, the habit of word-twisting and etymologising was growing, and was a ruling idea in later times; yet it is entirely absent in the Hermetic books. The reliance on amulets and charms was the main feature of religion in the later centuries, yet the Hermetic writers are quite free from it. The Font or Basin of Mind, in which men were to dip to receive mind, and so become complete men, is imagery belonging to the earlier baptism of John for the Descent of the Spirit, and has no part in the post-Christian notion of baptism to wash away sin. In these, and other ways, we see how a late date for these writings would imply a reversal of the known course of thought, whereas the dates between

500 and 200 B.C. place them in their natural position in development. We are assured by Prof. Scott that in these books there is hardly anything which is of Egyptian origin. We have so little of philosophical literature left from Egypt that it is difficult to compare Egyptian origins. But we read "Righteousness is cast out, iniquity is in the midst of the council hall, the plans of the gods are violated, all men alike are under wrongs, as for respect an end is made of it. Darkness will be preferred to light, and death will be thought more profitable than life, the pious will be deemed insane, and the impious wise; the madman will be thought a brave man, and the wicked will be esteemed as good, and so the gods will depart from mankind. The peaceful face is wretched, the good is disregarded in every place." There seems but little difference in character between these passages, yet they are compiled from (1) an old Egyptian writing of the Middle Kingdom, (2) the Hermetic passage beginning at "Darkness," and again (3) the old Egyptian in the last sentence. We read of Thoth knowing and seeing all that passes, and men being punished on earth, or, if not, in heaven, and of all the good that comes from the water of Thoth—which is the water of life—in a tomb of the IIIrd cent. B.C.; like those who have "dipped themselves in the bath of Mind . . . and so become complete men," in *Libellus IV*. The Egyptian reasoned that "It is the tongue which repeats the thought of the heart; it (the heart) is the former of all gods . . . at the time when every hieroglyph even came into existence, as a thought of the heart which the tongue commanded," and so the Hermetic reasoned, "Speech then is an image of mind, and mind is an image of God . . . mind deals with soul, soul deals with air [breath], and air deals with gross matter." The concord of physical action and moral sense is splendidly set out in the great hymn of Akhenaten, and was familiar to the Egyptian as it was in later times to the Greek.

The Indian influence on Hermetic writing is seen in doctrines such as those of rebirth and introspection; this can hardly have been brought in except when the Indians accompanied the Persian army. In the *Mahabharata* *Adi Parva* is seen a dogma of the soul closely akin to the Hermetic; some souls dwell for 60,000 years, some 80,000, in heaven, and then they fall . . . the being becomes a subtil substance . . . in which is the seed of vitality, and entering trees, plants, etc., becomes of quadrupedal and bipedal forms. Similarly, in *Isis to Horus* (excerpt xxvi), souls which have discernment enter human bodies, others bird bodies or quadrupeds, or reptiles; the most timid enter fish bodies. The Indian said that the virtuous attain to a superior, the vicious to an inferior, form of existence, and so in the *Kore Kosmou* those who erred slightly should be greeted again in their home above, while sinners were condemned to be beasts.

In the whole of this Hermetic imagery and ideas there is a simplicity and a splendid tone which would be inconceivable in the decadent word-splitting age of the disruption of the Empire, or of Heliodorus or Julian. When we rid our minds of the misconception that the Hermetic books are a part of Greek philosophy, which they detest, and see that they belong to those lines of Egyptian and Indian thought which were borrowed by Pythagoras and Plato, the earlier date under the Persian dominion puts all the details in their historic position, and unifies these works with the development of dogma seen in pre-Christian centuries.

Since the above was written, we hear of the sudden death of Prof. Walter Scott, which will be greatly regretted by all who are interested in these enquiries. It is to be hoped that the promised volumes, which should complete this work, have been left in such a form that the value of his researches will not be lost.

The Gospel of St. John according to the earliest Coptic manuscript. Edited by Sir HERBERT THOMPSON. 4to. xxx and 70 pp. 43 pls. (British School of Archaeology in Egypt, and Quaritch.) 1924. 25s.

This papyrus, found two years ago at Hamamieh, has here been exhaustively studied and published. After an account of the discovery, the nature of the manuscript, its date, peculiarities of the text, the dialect, and general conclusions, there is a detailed statement of the evidence on the condition of the Greek text which underlies this version. The papyrus is issued in photograph on forty-three plates, each containing the two sides of one leaf, and facing each is the text in Coptic print. At the end is the Coptic glossary, and a list of foreign words. Lastly comes an English literal translation of the Coptic. The very early date of this copy, only exceeded by the Vatican Greek MS., renders it one of the most valuable authorities for the original text. The British School is indeed fortunate in being able to entrust so important a publication to an editor whose care is worthy of it. The volume has already reached all guinea subscribers to the School to whom it was due.

Ancient Egypt, sources of information in the New York Public Library. By IDA A. PRATT. 8vo. 485 pp. (New York Public Library.) 1925.

This catalogue gives a very extensive bibliography of works on ancient Egypt, fully classified in detail, and will therefore be an aid to study. Beside the subject list there is an authors' index, giving the title of every book, article, or paper published. Maspero comes out first in the number of his entries, though he wrote few volumes. The Library is very complete in works of the last fifty years, and the gaps are in the older literature. There is no entry of Rifaud, Stobart, Minutoli, Paul Lucas or Prosper Alpinus; nor under the authors is there Wilkinson's *Architecture*, Loftie's *Ride in Egypt*, Petrie's *Sinai*, or Athanasi's *Researches*.

Ancient Egyptian Works of Art. By ARTHUR WEIGALL. 4to. 354 pp. 1924. (Fisher Unwin.) £3 3s.

A collection of 270 pages of excellent photographs of Egyptian art is sure to be welcome, and the quality of the reproductions is worthy of such a volume. The question of selection for an anthology is always difficult, but at least the most important subjects should be included. The Gebel Arak knife-handle is the foundation-stone of art in Egypt, the gazelle palette is the earliest of such artistic work, the head of Khufu is one of the finest character portraits, but none of these are included. Ranefer is the noblest statue of an official, but the plate is gloomy and ineffectual. Other first-class subjects are not found here, such as the Zet stele, Pepy-ha-shetef statue, glass mosaic of Dahshur, Lahun pectoral or Horemheb's Memphite tomb. What is really needed is a more select series of all the first-class work of each age.

The author, on the ground of long experience, claims a certain pontifical attitude of judgement, but it is hard to reconcile this with the exclusion of the wooden statue (p. 42) and Ranefer head (p. 47) from his list of the finest work. Nor is it possible for any one with a sense of portraiture to agree in placing entirely divergent heads to Amenemhat III, or to Akhenaten. The publisher scarcely follows the usual amenities. One quarter has been added to the weight of the volume by blank pages, of which there are seventy; there is not any statement of sources of the illustrations, and though many of them are copyright there is no acknowledgement, nor note of permission to use the labour of others.

Early Hebrew History. By HAROLD M. WIENER. Sm. 8vo. 117 pp. 1924. (Robert Scott.)

The studies in this volume point out the changes in law and ideas, and the ethical principles in different periods. There are the two opposing tendencies, one of religious separation, which enforced national unity, and the opposite centrifugal tendency of nomadic tribalism, which broke up into small groups. An enlightening examination of the additional passages about Jeroboam in the Septuagint explains various difficulties in the present Hebrew text, and renders the politics of the division of the kingdom more intelligible.

Another chapter deals with the Law of Change, showing how various ordinances were successively adapted to the historical conditions. The instances of provision for changes are discussed, and the various steps throughout the theocracy, the kingdom and the return. After this, the different kinds of responsibility are disentangled with legal insight, the joint responsibility as one of a community, the hereditary result as in a family, and the individual choice. It is pointed out how new conditions, acting on the past, produce a joint result different from either element—the moral resultant. The long-distant results of a single choice by a people or person are dwelt on, noting how one decision carries forward a chain of history, and discussing the cases of collective and vicarious punishment. It is refreshing to meet such a close criticism and insight, free from the arbitrary assumptions and misreadings so frequent elsewhere; it should be read by any one who wishes to understand the Law and the Prophets.

JOURNALS.

Comptes Rendus, August–October, 1924.

Excavations are continuing in the Hauran at Sheykh Saad, by Prof. HROZNY. The remains are Amorite, influenced by Babylonian and Hittite connections. The so-called Job stone proves to be a stele of Ramessu II, dedicated to the local god. We must congratulate the Czecho-Slovak Government on showing more enterprise than our own.

Prof. JÉQUIER discusses the *sekhem* and its meaning. In the Pyramid texts there is "the *sekhem* of which the name is 'Joy of Heart,' and which on the north of the Sekhet Aälu is set up" for the deceased king. The sign is said to bear equally the names of *aba*, *kherp*, *hu*, and *sekhem*, only the *sekhem* is distinguished by two eyes, showing that it has a divine life. It appears in the Book of the Dead (Any, CLI) on the north side of the sepulchre, with the couchant jackal, as also on coffins and steles. It is also the subject of the scenes in the temple of Sety at Abydos, and it may be a primitive cult object of Khentamenti.

The cemetery of Sidon at Kafr Gerra is now being cleared, yielding bronze weapons, alabaster vases and blue-glazed vases, pottery and cylinder seals, of about the XVIIIth dynasty.

A law for excavations has been decreed, and the excavator may have a part of his discoveries, but only of such objects as are similar or equivalent to those already in the Syrian museums. Apparently any number of museums are to be supplied before anything is allowed to go elsewhere. This is expected "to have the happiest consequences on the development of research." Excavators may well think otherwise.

M. Lacau gives his annual statement of work of his department in Egypt. The ruins of the church of St. Menas have been repaired where necessary. Some tombs have been cleared east of the pyramid of Khufu, disclosing a fine granite sarcophagus of house-form, with a panther skin carved on the roof-lid. A great variety of tomb plans of the IVth and Vth dynasties, between the Khafra pyramid and the Sphinx, show how variable the type was in one age, somewhat like the great variation of type in the Ist and IInd dynasties at Bashkatib. At Abydos it has been needful to place a pent roof projecting from the walls to screen the sculptures from rains. At Karnak the Xth pylon has been restored; the temple of Amenhetep II has been cleared and restored, and it proves to have been built out of an earlier work of the same king, confirming the long reign stated in history. In the IIIrd pylon there is more alabaster of Amenhetep I and Tehutmes I (over three-quarters of their chapel is recovered), also more red sandstone of the Tehutmes chapel of Hatshepsut—over 114 blocks are now known, and the colours are intact, having been walled up. At Saqqarah, beside Mr. Firth's work, Mr. Gunn and Mr. Dunham, Prof. Jéquier and M. Kuentz, are working at the Mastabat Fara'un, and toward Dahshur. The very interesting results of the clearance of the chapels of the IIIrd dynasty have appeared in illustrated papers recently, and the interior of the Step pyramid proves to contain many inscribed vase fragments of the two previous dynasties.

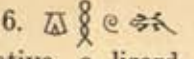
Zeitschrift für Ägyptische Sprache. Vol. LIX, part 2, 1924.

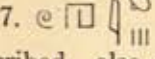
SETHE, K.—*Die Sprüche für das Kennen der Seelen der heiligen Orte.* In this article, Sethe finishes his exhaustive study of the group of chapters in the Book of the Dead for "knowing the souls of sacred places." The first part of this treatise was published in *Zeitschrift*, LVII, 1922 (*A.E.* 1923, part I). Chapters 108, 111, and 149d are dealt with in this portion of the paper; they are concerned with the "Souls of the West." One M.K. title, "Not to die by a snake," shows that Chapter 108 was considered efficacious against snake bites.

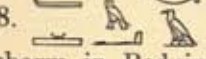
ANTHES, RUDOLF.—*Die zeitliche Ansetzung des Fürsten Nḥry I vom Hasengau.* This article is an attempt to date Nḥry I of the Hare nome by a consideration of his titles in the graffiti of Hatnub. Some of these titles are exceedingly rare, and seem to denote very special services rendered to the Heracleopolitan king in his struggle against Thebes. The writer concludes that the graffiti throw light on a stage in the struggle hitherto unknown, in which the Thebans had penetrated northwards beyond Siut into the Hare nome. He considers, therefore, that Nḥry I lived in the decades immediately preceding the XIIth dynasty, and thus reaches a conclusion which confirms Möller's identification of Kꜣy, son of Nḥry, with Kꜣy, grandfather of Amen-em-hat.

WOLF, WALTHER.—*Vorläufer der Reformation Echnatons.* In the opinion of the writer of the article, the Reformation was entirely the work of Akhenaten, though he appropriated and utilised ideas which were already familiar.


BONNET, HANS.—*Zur Herkunft der sogenannten Tell-el-Jahudiye-Vasen.* Though the material available is insufficient for settling the question with certainty, Bonnet considers that the actual country of origin of the Tell-el-Yahūdiyyah ware must be sought in Nearer Asia, probably Syria. He holds that Junker's attribution to Nubia is entirely without foundation. Junker (*Sitzungsber. der Ak. der Wissensch. in Wien*, 198, Band, 3, Abhdlg.) attributes their distribution to Nubian

6.  = *Asthma* (?). The only clue to this illness is the determinative, a lizard or chamæleon. The latter animal emits a curious noise when perturbed, very much like that of asthmatical breathing. [Perhaps modern Egyptian *kuhha*, cough.]

7.  = *Diarrhœa*, or something similar. Castor-oil seeds are prescribed, also cooked ox blood. Dioscorides prescribes the cooked blood of certain animals for diarrhœa and dysentery, and castor oil is still used for these complaints.

8.  = *humâq* (?). The London Medical Papyrus contains "a charm in Beduin speech" against this illness. The name is obviously a foreign word, and may be derived from the Arabic *hâmaq*, an illness which is frequently mentioned by Arab writers. The disease seems to be a fever accompanied by a rash.

SPIEGELBERG, W.—*Der böse Blick im altägyptischen Glauben*. Proper names, particularly women's names, are the best evidence for the belief in the power of the evil eye in Egypt. Spiegelberg traces the name *Stꜣ-ir.t-bin.t* from Saïte to Coptic times, translates it as "God N. removes (or tears out) the evil eye," and considers it to be of kindred meaning to *Hdb Nt* (or *Hnsw*) *ir.t bin.t* "Neit (or Khonsu) kills the evil eye." He cannot find any trace of this belief before the Saïte period.

KEES, H.—*Der Name des Suchosheiligtums von Illahun*. In *Zeitschrift*, LIX, part I, Scharff read , the name of a sanctuary of Sebek, as *r-ḥn.t* Illahun. Kees now shows the true reading to be *r-sh.wy*, "Opening of the two halls," on the evidence of an unpublished fragment in the Cairo Museum, where the titular Sebek lord of *r-sh.wy* is written out in full. This inscription is behind Sebek lord of *grgw-bꜣ.f* (known from the Pyramid texts to be the name of the Busiris sanctuary of Osiris) and faces Sebek lord of Crocodilopolis and Sebek lord of Busiris. These titles point to a cult of the crocodile at Busiris which has passed without notice hitherto.

MISCELLANEA.



SETHE, K.—*Nochmals zum ägyptischen Namen von Byblos*. The name "Mistress of Byblos" for a member of a seafaring family confirms Sethe's connection of the words for sea-going craft (*kbn.t*, *kbnꜣ.t*, *kpnw.t*) with the Egyptian name for Byblos.


TILL, W.—*Zu n.nk tm*—"mir gehört das All." In disagreement with Sethe (*Zeitschrift*, LIV), the first *n* is taken to be the Nisbe form of the preposition.

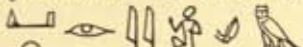
WOLF, W.—*Amenhotep, Vizekönig von Nubien*. The writer dates Amenhotep, viceroy of Kush (known from the Sehel graffito) to the time of Thothmes IV by identifying him with the royal son Amenhotep who dedicated a stele to this king at Wadi Halfa. Both inscriptions contain similar titles, particularly "overseer of the cattle of Amen," a title which is unique amongst viceroys.

BISSING, FR. W. v.—*Zur ägyptischen Pflanzensäule*. A Hathor capital in Cyprus of about 500 B.C. is clearly derived from an Egyptian prototype. The head

of the goddess surmounts a cluster of papyrus flowers so that the pillar is comparable with the columns of Nectanebo at Philæ. Further confirmation is thus added to the theory for the use of the Egyptian "bouquet" pillar in pre-Ptolemaic times.

SPIEGELBERG, W.—Zu $R_2-s't_3.w$ () "Nekropolis." In the use of the sign  Bw "wind" in late variants of this word, Spiegelberg sees an attempt to give the vocalisation.

SPIEGELBERG, W.— dd mdw im Koptischen. The writer now derives $\chi\epsilon\mu\tau\alpha\tau$ from dd mdw , so that the noun $\tau\alpha\tau$ from which he derived the word (*Koptisches Handwörterbuch*, p. 156) is required no longer.

SPIEGELBERG, W.—Der Ursprung des Finalis $\bar{n}\tau\alpha\rho\epsilon$, $\tau\alpha\rho\epsilon$. In the τ Spiegelberg sees a survival of $dy.t$ "to give," and regards n $dy.t$ as the infinitive following the genitive preposition n meaning "for the purpose of." Thus $\bar{n}\tau\alpha\rho\iota$ $\epsilon\omega\tau\bar{u}$ actually means "in order to give so that I hear" and corresponds with N.E.  n $dy.t$ $iry-y$ stm .

WIESMANN, H.— $\chi\epsilon$ zur Einleitung der Apposition. Instances are given of the use of $\chi\epsilon$ before appellatives in apposition.

WIESMANN, H.—Das Geschlecht von $\rho\epsilon\iota\tau\epsilon$ Kleid. Further examples are given to show that this word may be feminine in gender.

WIESMANN, H.—Verwechslung von $\rho\eta\tau$ (Herz) mit $\rho\eta$ (Bauch). Passages are quoted in which the Coptic word for "heart" is used instead of the word for "stomach."

WIESMANN, H.—Der Artikel bei $\sigma\rho\epsilon\phi\eta\tau\epsilon$. Wiesmann detects a lack of precision in Spiegelberg's remarks on this word in his *Koptische Handwörterbuch*, as the singular seems to be not uncommon and the plural article is generally μ .

WIESMANN, H.—Bemerkenswerter Gebrauch von $\rho\eta$. The writer draws attention to a peculiar use of this preposition.

L. B. E.

NOTES AND NEWS.

SUBSCRIBERS to ANCIENT EGYPT may become Associates of the British School of Archaeology in Egypt by contributing 10s. per annum, which entitles them to receive the journal quarterly, post free, and to receive notices and other privileges of Members. This course was suggested by one of the subscribers, and those who have already sent in 7s. can become Associates on sending 3s. in addition. It is hoped to have a gathering in the Edwards Library in the autumn.

Excavations of the British School.

The work of the British School this season has been almost entirely on the remains of the earliest civilization, the Badarian. Miss CATON-THOMPSON, accompanied by Miss Hughes, made the first scientific search of the sites at the north of the Fayum. The position is difficult for work, as the water supply has to be brought fifteen miles. Several early settlements were found, some of them with five feet depth of remains. The flint sites extend far below the level reached by the lake in late Egyptian times. It seems that they must belong to an age long before the Nile deposits had raised the level of the Nile, and of the lake which it fed. This implies an age of at least 13000 B.C. for the Badarian culture. A large number of flint axes, knives, arrow points and other forms have been obtained from fixed levels, so the history of this age should soon be fairly settled. At Badari, south of Asyut, Miss Caton-Thompson continued to excavate the settlement, and recovered more of the prehistoric series. Mr. and Mrs. BRUNTON resumed excavation of the Cemetery at Badari in January, finding beadwork on leather belts, fine linen, ivory spoons, and good flint knives. Unhappily the work was shortened by Mr. Brunton's illness.

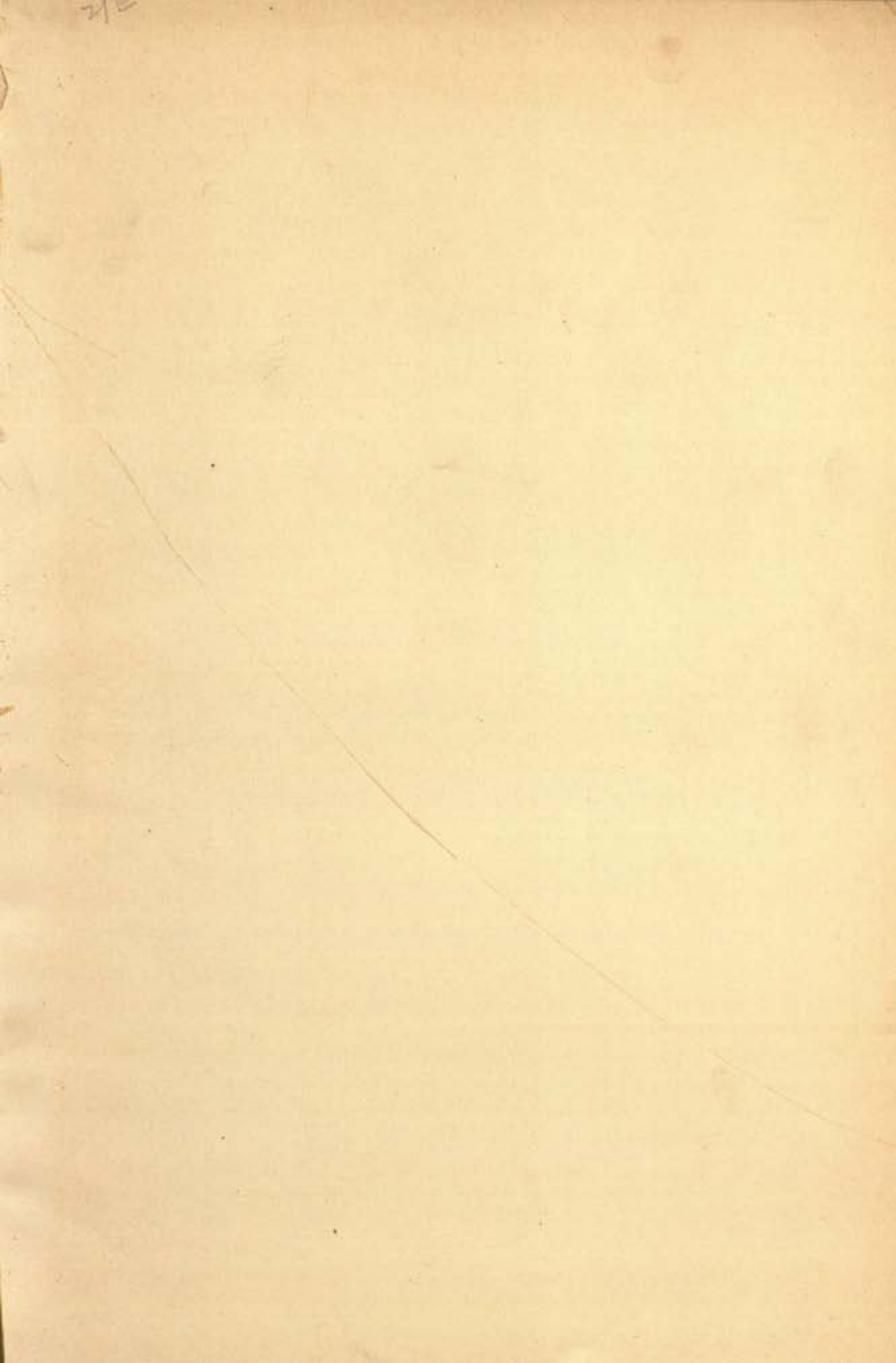
The exhibition will be held during the three whole weeks of July 6th to 25th and on the evenings of the 15th and 25th. Associates of the British School will be received at the private view on the 3rd and 4th July, 10—5.

Discoveries at Saqqara and Gizeh.

At last the Department of Antiquities has begun to excavate the sites which all Egyptologists have been waiting half a century to be explored. The shrine of the step pyramid of king Zeser shows that as early as the third dynasty there were fluted columns, and also foliage capitals and papyrus capitals. The rapid growth of this architecture within fifty years after the rude brick and stone sepulchre of Khosekhemui raises a most important question in the history of artistic development.

The sensational discovery of a pyramid site and great tomb at Gizeh, with the name of Sneferu on the lid of the coffin, must await future work to explain the nature of the burial. It is so far untouched, and has been walled up until Dr. Reisner can develop this result of his excavations.

Mr. Carter has been steadily clearing up the great mass of discoveries already removed from the tomb of Tutankhamen, preparatory to dealing next season with the sarcophagus and two untouched chambers.





WOODEN STATUETTE 737. HERMITAGE MUSEUM (see p. 71).

ANCIENT EGYPT.

THE ROYAL MAGICIAN.

A FREQUENT scene of the Royal functions is that of the king rapidly striding or running, and bearing certain objects. In the treatise by Hermann Kees¹ these performances are termed *Opfertanz*; the action, however, is running and not dancing, and its purpose is not to sacrifice or offer, but is parallel to that of the African rain-maker, as we shall see below. Such scenes are usually sculptured at the ends of the lintels in great temples, but are occasionally placed elsewhere.

Before proceeding to details it will be best to state a few points which show the general meaning. The three *adeb* signs which are placed behind the king are the hieroglyph of cultivated land, as is shown by various titles; the ceremony, therefore, is in the fields, or connected with fields. The king often has standing before him a small female figure, with the plant of Upper or of Lower Egypt on her head. The figure invites the king to act: "come and bring the inundation" (*mert*) (see inscription 7). This function was also performed towards the bull, *hapi*, representing the Nile, as explained on a block (*Memphis* III, xxx, 3; see Fig. E, ins. 6), where Egypt says: "Come and bring, come and bring the inundation (*mert*), giving life to the fields." This figure of the galloping bull often accompanies the king (Fig. C), to show what he brings with him. The action of the king is thus connected with the inundation, and this invocation begins as early as the Vth dynasty.

The galloping bull Hapi, "he of Hap," the Nile, being, then, an emblem of the potent Nile, it appears that the *hap* sign used for the bull may be equally the inundation sign. So where the king runs before a god, bearing the *hap* sign, and is said to bring *hap* to his father, he is bringing the life-giving water, as an African king brings the rain. Also the king is "stalking through the fields and going round the nomes" (ins. 18), as stated at Ombos, and so producing "all protection of life and power behind him" (ins. 16). With these definite expressions in view we can proceed to consider the scenes in detail.

The earliest of such scenes is that with the FLAIL (Fig. A), connected with the *heb sed*, or festival of the tail. The Osiride figure of Normer in a shrine (Q.H. XXVI B) is attended by men carrying two tall fans, the sacred use of which continued down to Roman times (L.D., IV, 75). Two reigns later, Zer is seated, in the *sed heb* garb holding the flail, with the same jackal and feather standard as accompany the king in later scenes (R.T., II, xv, 108). Two reigns further on, king Den is figured Osiride, while before him runs a royal figure in the fields, *adebu* being on each side of him (R.T., I, xv, 16). Slight as these traces are, they suffice to show the early origin of the ceremony. The first full view of it is under Ne-user-ra in the middle of the Vth dynasty (Bissing, *Re-Heiligtum des Ne-woser-re*), and this is partly explained by the scene of Pepy I in Sinai (Sin. 16). There Pepy, like previous kings, is "subduing the Menthu" people,

¹ *Der Opfertanz des Ägyptischen Königs*, 1912.

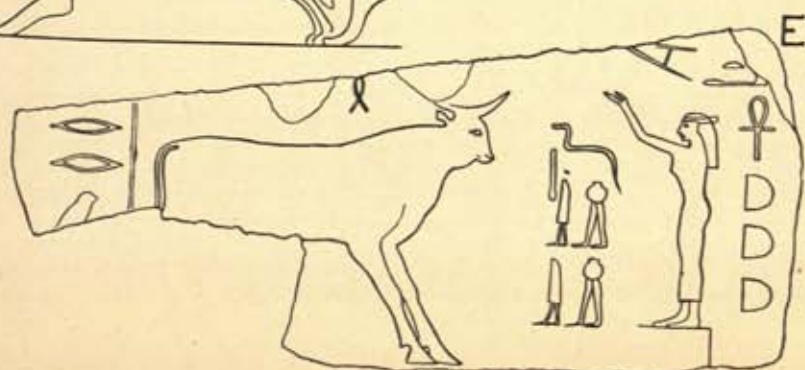
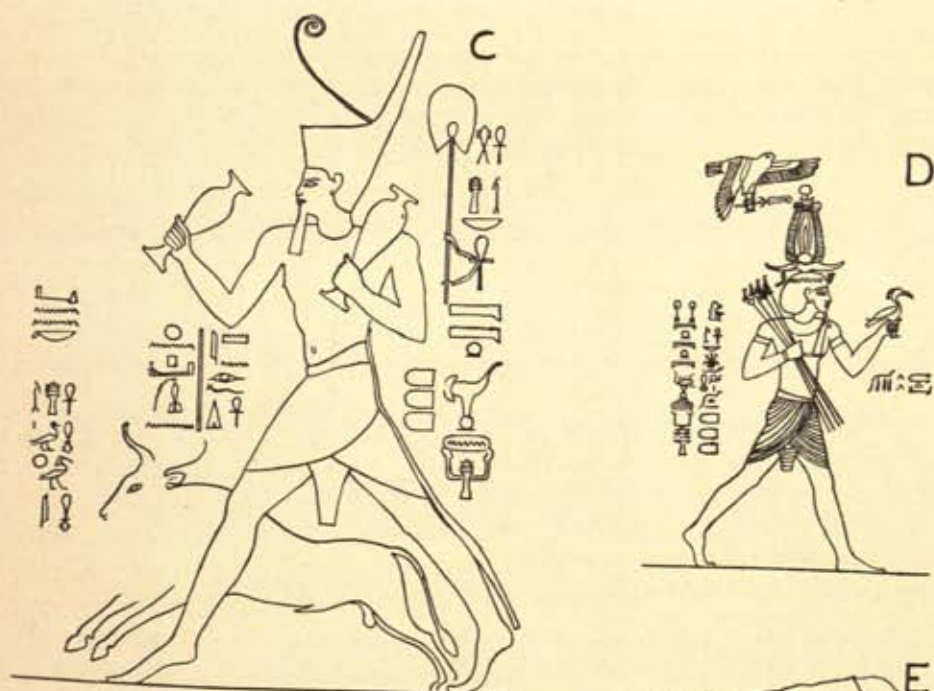
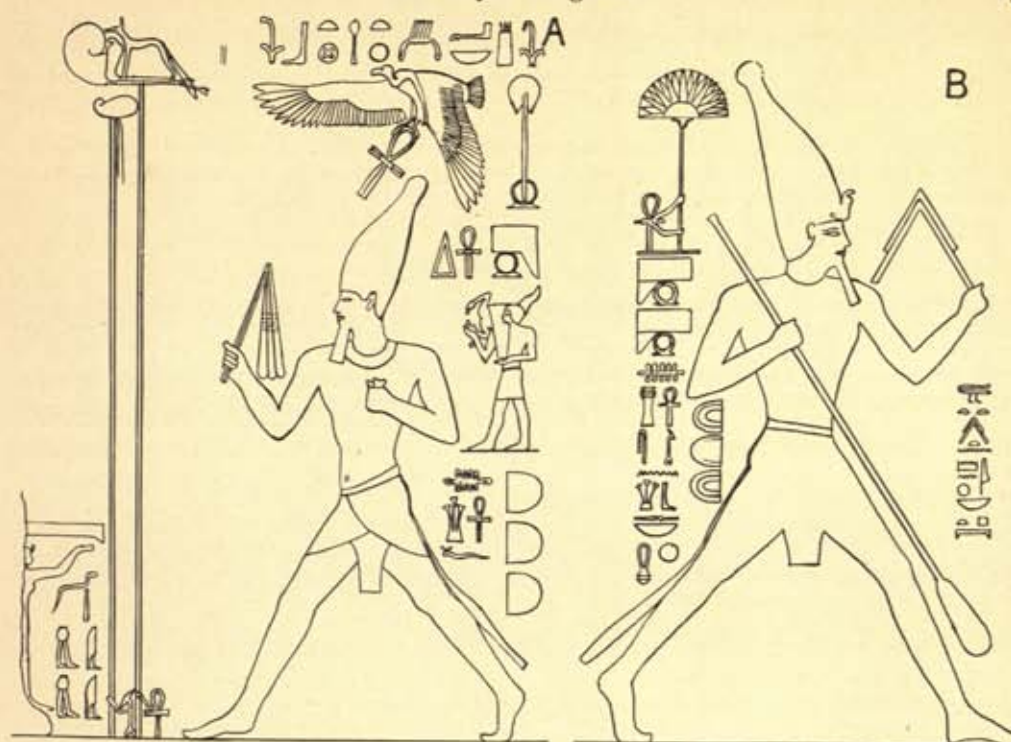
written *dā Menthu*, or subduing the mountaineers (Sin. 8, 10). In the next scene, he is *dā sekhet khep* "subduing the fields by going." Similarly, Ne-user-ra (ins. 1) is "subduing in the fields, great striker with the bull's tail"; the determinative of the tail and belt as worn by the king, explains the name *Uatet*, tail. (Jequier, *Frises des objets*, 110.) This seems to show that the bull's tail was the origin of the flail and was the fertilizing lash that was used before the artificial form took its place. Further he "goes three times round the field," and he is gifted with all life, stability, and power, and all health, and Pepy (ins. 2) has "protection of life behind him." Thus the king went round the field ceremonially to drive away evil influence, fertilizing it with the flail, and leaving blessings behind him. The virtue of the influence of a king on fertility and vegetation is well known, and wide spread, even to England with touching for king's evil, and to Norway, where king Halfdan was cut in pieces, and part buried in each province to ensure fertility.

A subordinate figure calls on Ne-user-ra to "come and bring," but this is not necessarily the same as the later female figure of Egypt (Upper or Lower) calling to bring the inundation; the Vth dynasty figure may be calling for the "protection of life" which the king leaves in his track.

The next scene is that of the XIth dynasty (ins. 3), of which there only remains "subduing the fields four times" and "come and bring." The age of the gateway scenes in *Memphis II* has been disputed, but, on comparing all the formulae, it would be difficult to place it after the Middle Kingdom. *Sā onkh ha ef* is also the phrase of Pepy, and never occurs so simply in later times. The half-heaven signs are carried by men, as in the XIth dynasty (Mentu-hetep, Cairo, Bissing, *Denk*, 33A), while later they are only formal hieroglyphs. The *Selq* sign is similarly carried, but never so in later times. The water sign on the *zed* column is absent, while, it is constantly shown from Tehutmes III onward. The drawing of a few square yards in full-sized facsimile, of this gateway, and then of late sculpture, would soon make anyone perceive the difference. In detail, compare the hawk head of Senusert II (*Lahun II*, viii) with that of *Memphis II*, ii, 5; they agree in the length and flatness of the head, and both differ from the XXVIth dynasty hawk of *Memphis II*, ii, 4.

A difficult matter to disentangle is the origin of the *Selq* object carried by the man on the right of pl. V (*Memph. II*). It is an object partly covered with a cloth that hangs down; it is certainly not a scorpion, for it has no scorpion legs till a late period of this group (Ptolemy IX, El-Kab). Yet such a form belonging to the goddess Selqet was being confused with a scorpion in the XIIth dynasty, as in *Gizeh and Rifeh*, XIII, F and G. Had Selqet anything to do with a scorpion originally? It is never like a scorpion in the Pyramid texts. The original form of the sign is more human than animal. The sense of the reading *selq* or *serq* is apparently "to open," being the causative of *reqā* "to separate"; the senses of "piercing" or "breathing" are secondary, and the essential meaning is opening.

In the XVIIIth dynasty there is a change about the time of Tehutmes III. Before him, there is only one fan heading the formula, excepting in an instance (ins. 11) under Hatshepsut (Guimet, XXX, 1, viii); after him there are always two fans, except once, under Ramessu II (L.D., III, 143). A new sign appears in the formula, the long tank of water upheld by the arms on the *zed* pillar. The origin of this appears under Ne-user-ra, where, in the procession of officials bearing ceremonial objects, a long tank of water is carried on the head of a man.



This seems obviously an imitation of the inundation, borne in the water-bringing festival, to act by sympathetic magic. The meaning thus suggested for the later sign, therefore, would be "establishing the inundation." The two half-heaven signs have been compared to door hinges, but the real meaning is fixed by their being figured sometimes as the complete heaven (Tehutmes III, L.D., III, 36b; Abu Simbel, L.D., III, 185; Denderah III, 54). The fans are regarded as divine symbols (Kees, 122, 127); as they are held by the *onkh* (ins. 9, 11, 20, 21, 28) they are not divinities, but must be regarded as qualities. Hence they imply power or majesty, being the regular adjunct of African rulers down to the present time (e.g., in North Cameroons).

The whole group, then, may read as "The complete authority, or lordship (*sery shen*), of the whole east and west heaven fully opens the way (*serq*) establishing the inundation." That declaration, or prayer, is wrought out by the water-bringing king. The flail which the king carries in this ceremony, "striking with the bull's tail," reminds us of the flail of Min, and of Lupercus, the god of fertility, and the lashing with thongs of skins to promote fertility.

The next earliest ceremony was that of running with the HAP sign (Fig. B) and steering oar. This is first seen in the XIth dynasty, but indistinctly published. The best early scene is that of Senusert I (ins. 8); the fan is lost, but the two half heavens appear, and "protection of all life behind him." His act is "Bringing *hap* for Min the great god of his city," and Min in return promises to "Grant to him to make the *Sed* festival like Ra, living like him." Coming to Hatshepsut, the formula is rather longer, "protection of all life, stability, power, and health behind her, like Ra" (Fig. B), and again the "bringing of *hap*." *Hap*, as we have seen, is Apis, who is the Nile invoked to bring life to the fields. The meaning seems clear that the *hap* sign refers to the rising Nile, and the ceremony is to bring the inundation. This ceremony of the running of Apis is named in the IIInd dynasty under Neteren, on the Annals, *peherer hap* (15th year); apparently also so named (*peh*) *reru* . . . behind the Apis in Fig. E. This scene with the *hap* was then the bringing of the Nile.

The two fans appear under Amenhetep III (ins. 11) and were continued to Roman times (ins. 19). Some confusion with other ceremonies comes in under Ramessu II; for the "subduing of the fields four times" is introduced from the *heb sed* and the "offering of water" from the vase ceremony (Figs. 14-16). Also the galloping bull is combined with the scene of the running king. Otherwise there is no variation until a longer explanation comes under the Ptolemies at Ombos, "stalking through the fields, going round the nomes" (ins. 18).

The third ceremony was carrying two VASES (Fig. C) not figured before Hatshepsut. The fan inscription, and *sä onkh*, are as in other scenes, and the king is said to present (*khenp*) water to the god. Under the XIXth dynasty and Tiberius there is the variant of *kherp*, leading or controlling the water to the god. As the establishing of the inundation is still named, these offerings of water were either first fruits of the new Nile, or water poured out to invoke the rise of the river by sympathetic magic. At Edfu, the king "gives vases of the inundation of youthful water," and shews it to the god as first fruits, proving the success of the royal magic.

The fourth ceremony is less obvious. The king (Fig. D) holding an *ĀKHU* bird (*Ibis comata*, vel *comatibis eremita*), and a group of staves with emblems, runs towards Hathor. Possibly there is a fragment of this scene in the XIth dynasty (XI, D.B., II, ix B), but this might be only an offering scene. Otherwise

adebu. The king or queen is said to "bring quickly to Hathor, to make the ruler gifted with life eternal." The staves bear different signs of *onkh*, *zed*, *uas*, with the *akhw*, falcon, and vulture respectively. These imply that the king has already the possession of earthly blessings, but comes now to Hathor in order to "possess life eternally." The *akhw* is therefore the special object which he brings, and that is the sign of the glorified life which he claims from Hathor, as having fulfilled his earthly duties.

We can now see how Egypt had the African type of king, the rain-maker. All over Central and Southern Africa, from the Niger to the Cape, the chief or king has a principal function of being a magician in order to bring rain (see J. G. Frazer, *Early History of the Kingship*, pp. 112—119). In Egypt, there being no rain, the king naturally had the duty of bringing the inundation. It may be that the scene on the broken mace-head (*Hierakonpolis*, xxvii) referred to cutting the dykes at the inundations. The large objects figured in the early scenes of the Vth, XIth, and XIIth dynasties are clearly not mere signs, they were each a burden for a man; hence they were probably the paraphernalia for the actual ceremony. The king, shaded by the great fans of power (see the mace-head above), emerged between the two halves of the heaven; then, running round a field, he struck with his flail to promote fertility, and to exorcise evil influences, leaving a trail of life behind him. This was probably when the ground was parched at the beginning of the Sirius year. This year in early times began shortly before the *nugta*, or drop which starts the Nile; by 3400 B.C. Sirius coincided with the *nugta*, and afterwards it came later, in August, and now in September. When the Nile was due to rise, the king came, emerging between the heaven signs, and performed the ceremony with the trough of water. This brought up the inundation. Later, after it had risen, he brought two vases of the new water, of the south and of the north, to prove that his magic was successful over all the land, and he had completed his duty. Lastly, he came with his staves of office before Hathor to claim the *akht* or glorified life, that she should "make him to possess life eternal."

There are some other instances of ceremonies, with the Inundation formula, but without running. The king may stand in *sed-heb* dress, as with ins. 34; or in ordinary dress, as in 35. Connected with the *sed* festival there was a slaughter of enemies, probably really so in early times, and ceremonially represented later, as with ins. 36, 37, 38.

The inscriptions here are examples selected to show all the variants, preferring the earliest if possible. The sources are as follows:—(1) Bissing, *Re-Heiligtum des Ne-woser-re*, XIII. (2) *Sinai*, 16. (3) *XI temple Deir el Bahri*, II, vi. (4) *Deir el Bahri*, clvii. (5) *Champ.*, *Mon.*, I, 47. (6) *Memphis*, III, xxx, 3. (7) *Wilk.*, *M.C.*, III, 367. (8) *Koptos*, ix. (9) *D. Bahri*, xix. (10) *D.B.*, xciii. (11) *Guimet*, XXX, 1, viii. (12) *L.D.*, III, 119. (13) *L.D.*, III, 185. (14) *Kees*, *Opfertanz*, III. (15) *L.D.*, III, 143. (16) *L.D.*, III, 286. (17) *Cat. Ins. Ombos*, 524. (18) *Same*, 764. (19) *L.D.*, IV, 75. (20) *D.B.*, XXII. (21) *Guimet*, XXX, 1, viii. (22) *L.D.*, III, 33. (23) *L.D.*, III, 143. (24) *Kees*, *Opfertanz*, II, 4. (25) *Champ.*, *Not.*, I, 40. (26) *L.D.*, IV, 75. (27) *Mariette*, *Denderah*, II, 59. (28) *D.B.*, xcvi. (29) *L.D.*, III, 57. (30) *Gayet*, *Luxor*, LXXIII. (31) *Z.A.S.*, 39, IV, V. (32) *Edfu*, XXXB. (33) *Denderah*, II, 54. (34) *L.D.*, III, 36B. (35) *Koptos*, vi, 5. (36) *D.B.*, clx. (37) *Memphis*, II, 21. (38) *L.D.*, IV, 74.

AN UNPUBLISHED WOODEN STATUETTE.

(See Frontispiece.)

IN the Hermitage collection a small wooden statuette attracts particular attention. The Academy of Science of Russia acquired it with other things of the Castiglione collection in 1826, and it is numbered 737 in the catalogue of Golénischeff.¹ It is .345m. (13½ inches) high; the material is a solid dark wood (acacia?). This statuette belongs to the category of those small funereal figures, which, according to the opinion of Sir G. Maspero, were the cheaper substitutes for the stone sculpture, which was too expensive for a man of middle wealth; such as the "scribe de rang secondaire, vieux officier en retraite, marchand en detail, petit chef d'industrie." But the fineness of the work of this statuette, already noticed by Prof. Golénischeff, ranks it in the number of the masterpieces of Egyptian art, taking an honourable place among the best works of this category.

The deceased man is standing. His left foot is set forwards; the left hand hangs down, the fist is clenched and bored inside. The lower part of the body wears the ribbed waist cloth. The cloth represents a piece of stuff of an oblong form; wide in the middle part, contracting to the ends, so that its lower border falls behind nearly till the knee-hollow, leaving the knees before quite free. The cloth envelops closely the sides and the back of the body, delineating it. The belt tightens the figure with three relief plaits, and falls in front below the navel. One of its ends is put through a buckle and is drawn up with a noose. The cloth is stretched behind quite smooth, forming on the sides some wavy plaits, disposed in an ascending line to the front part of the belt. The long end of the cloth hangs in front as an apron, widening a little downwards by deep plaits. The upper part of the body is bare, the head is quite shaved. Upon the body there are no traces of colour, except on the nipples, marked, as it seems, with a darker colour. The waist cloth was coloured, over the stucco, which was laid upon a thin linen, darkened by time.

There are many cracks on the statuette; the right hand is broken off, the fore parts of the feet, worked in separate pieces of wood, are lost. The head, arms, and torso were carved in one piece. The left hand below the elbow has a piece inserted; the legs had also in several places pieces carefully glued in. The anatomical details of the body are very finely executed. The knee-pan of the left foot, set forward, is marked very carefully, as well as the inside of the ankle. The play of the thin muscles of this meagre body, the clavicles and the hollow down the spine are executed also with great care. One ought to note the high waist and long legs, which produce the impression of a peculiar shapeliness of this figure. The straight shoulders are very high, like the Louvre statuette of an officer,² which gives the impression in the profile position of the figure of a slight stoop.

¹ *Inventaire de la collection égyptienne*, 1891.

² MASPERO, *L'Archeologie égyptienne*, p. 270, fig. 259.

The soft traits of his regular face are executed not less carefully. The nose is straight, a little rounded at the tip, with broad nostrils drilled out. The lips of a small mouth project but slightly, and its corners are a little raised with a pleasing expression, that reminds us of the face of Ptahmai, on the Berlin family group No. 2297. The small round chin is rather prominent. The eyes, disposed somewhat obliquely, are notably long, reaching to the temples. The prominent upper eyelid and the eyebrows in high relief strengthen the impression of a somewhat Japanese type of the face, recalling also the beautiful wood statuette of Toui in the Louvre museum.¹ The large, well-formed ears, placed perhaps a little too high, are extremely finely executed. The well-developed forehead slightly slopes back to the smoothly-shaved skull, narrowed at the temples and wider behind.

The master executed very finely the anatomical details of the occiput, the slight hollow between the skull and the neck and the tendons at its sides—details peculiarly perceptible when passing the fingers over the surface of the carving.

Reviewing all these details one must realize that this work shows an excellent sculptor, who understood the advantages of such a grateful material as the wood, in spite of the small size of the statuette and the rigid traditionality of the pose. Notwithstanding the absence of any explanatory inscription (the ancient base being lost) we can date the statuette well enough. Maspero indicated that all the wood statuettes of such a type must be referred to the epoch of the XVIIIth–XIXth dynasties.² Legrain places decidedly the principal quantity of wood statuettes to the end of the reign of Amenhotep III, and to the beginning of the reign of Akhenaten.³ He finds that the art of Tell-Amarna is only a translation into the monumental art of that style, which was previously created by the artists of the small wood sculpture. The dress, the expression of the calm affability of the face, the artistic execution of the meagre body with its lengthened proportions, all permit the dating of our monument to the epoch of Amenhotep III.

However, by several signs one could perhaps admit the beginning of the following reign, before the introduction of the specific Tell-Amarna style. It is confirmed by a hardly perceptible preciousness of the expression of the statuette face, the exaggerated length of the exterior corner of the eyes, and the eyebrow, reminding one of the heads of Akhenaten's daughters, and the treating of the shaved skull which is characteristic of the Tell-Amarna art, although the boundary of anatomical regularity is not exceeded. The same period is perhaps indicated by the form of the waist cloth, very smoothly enveloping the body behind, and forming before a voluminous apron, slightly raised above the knees.

N. FLITTNER.

¹ FECHHEIMER, *Die Plastik der Ägypter*, t. 70.

² RAYET, *Monuments de l'art antique*, I.

³ *Musée égyptien* II, p. 4.

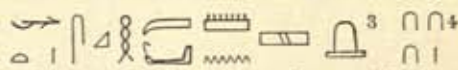


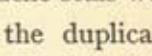
STATUETTE 737. HERMITAGE COLLECTION, XVIIIth DYNASTY.

A STAMP OF KING AMENHOTEP III.

FROM THE COLLECTION OF N. P. LIKHACHEFF.¹ (Figs. 1, 2.)

THIS is a large stamp, height .06m. (2.4 inches) made of dark brown wood (acacia) in the form of a goose, turning its head on its back. The long curved neck serves as the handle. The bird's eyes are marked by two circles, and the nostrils by two small grooves. Just beyond the head there is a hole for a cord. The cartouche (0.105×0.052) of the stamp bears the throne-name of the King Amenhotep III. The ring of the cartouche and the interior surface of the hieroglyphs are deeply incised in the wood. The absence of the feather on the head of the goddess can be explained evidently by the lack of space; but the absence of nearly all details of the hieroglyphs gives us the idea that the cartouche and, perhaps, the whole seal, were covered with a thin gold plate, upon which were marked all the details. Such a gold plate covering the cartouche would explain why the material of the royal stamp was of wood. The fact is, that in the period of the New Kingdom wood was never used for this purpose, because it was not sufficiently valuable or beautiful.² Papyrus Harris mentions, as it seems, such wooden seals covered with metal. There is mentioned in this papyrus among the list of King's offerings to the gods of Thebes, Heliopolis and Memphis the following donation:


 the wood *škh*, cartouche seal⁵ 31.

The number 31 is curious; evidently Ramessu III during his thirty-one years' reign presented every year one cartouche seal.⁶ In the word *škh*, determining wood of which the cartouche seals were made, I see the causative of the verb *kh(j)*⁷, that is known in the duplicated form, , "*khkh*."⁸

The verb *khkh* could signify "metal hammer or stamp."⁹ The same meaning was inherent probably in the simple root *kh(j)*.¹⁰ The literal sense of the causative *škh* would be in that case: "to beat or strike metal,"¹¹ and *kh škh* could be translated as "the wood and metal stamp,"¹² that is a wooden object requiring still fashioned metal, evidently for its covering.¹³ Therefore, I would translate the above phrase from Papyrus Harris as: "the wood enveloped with metal—cartouche seal 31."

If it is possible to agree with my translation, then we can compare our seal of Amenhotep III with these cartouche seals of Ramessu III. The more, that the seal of Amenhotep III could be named also the cartouche seal. Indeed, its form did not coincide with that of the seals of Ramessu. The latter ones according to their title in the total-register, "cases (*gʷt*)—cartouche,"¹⁴ recall the cups for the trituration of ointment, which received often the form of the cartouche.¹⁵

The form of the seal of the collection of N. P. Likhacheff representing a resting goose is characteristic of the period of the New Kingdom. In fact, the image of the goose, though very popular in Egypt, in religion¹⁶ as well as in life,¹⁷ was used in the applied arts only in the New Kingdom. At that time the image of the goose, or the duck, similar to it, was used as the ornament of a golden bracelet,¹⁸ or stone vessels.¹⁹ There were worked the wooden cups in the form of ducks for the trituration of ointment.²⁰ Also the feet of the stools often ended with heads of geese or ducks, in place of lions' heads.²¹ At the same time appeared also the seals in the form of resting geese or ducks.²² According to the observation of Newberry, "seals with ducks seem to date from the reign of Amenhotep III."²³ These



Egyptian seals in the form of geese, and ducks, remind us very much of the Assyrian weights in the form of resting ducks.²⁴ Their resemblance is so close, that a thought comes involuntarily in the mind about some connection between the goose, and duck-seals of the time of Amenhotep III, and the Assyrian duck-weights. Such a connection between the Egyptian applied arts of Amenhotep III and those of Assyria and Babylonia need not astonish us. We must remember the Babylonian myths and legends kept in the archives of Tell-Amarna,²⁵ the statue of Amenhotep III in the dress of an Assyrian King,²⁶ and at last the statuette of the demon, found, as it seems, on the site of the palace of Amenhotep III, much like the Babylonian demons.²⁷ The foreign origin of Egyptian seals with ducks is

denoted perhaps also by the fact that one of such seals is undoubtedly of Syrian work.²⁸ It remains to settle the question, what things were to be sealed with Amenhotep III's seal, distinguished by such a big size? It is known that in Egypt they sealed up chambers as well as documents. It seems that such a large seal was not for papyrus, but for the apartments, and, to conclude, I permit myself to make the conjecture that Amenhotep III's cartouche seal of the Likhacheff collection was used for the sealing of the corn-bins and the treasuries of this powerful king's palace.

V. STRUVE.

NOTES.

¹ I express my hearty gratitude for the authorisation to publish the seal of N. P. Likhacheff.

² HALL, *Catalogue of Egyptian Scarabs*, 1913, pp. xxviii-xxix. [A scarab and three seals of the Middle Kingdom in U.C. are of wood.]

³ See G. MÖLLER, *Paläographie*, II, No. 533.

⁴ Pap. Harris, pl. 15b, 10; 34a, 12; 53b, 4.

⁵ See W. SPIEGELBERG, *A.Z.*, 43 (1906), 138.

⁶ See BREASTED, *Anc. Rec.* IV, § 234, b.

⁷ Perhaps one must draw also the root *škh* and *ikh* (see A. ERMAN—H. GRAPOW, *Ägypt. Handwörterbuch*, p. 4).

⁸ The Causative preserves often an older form of the verb's root than the Qal (see K. SETHE, *Verbum*, I, § 352).

⁹ A. ERMAN—H. GRAPOW, *l.c.*, p. 192.

¹⁰ See *ršrš* and *ršj*, *gbgb* and *gbj*, A. ERMAN, *Äg. Gram.*,³ § 272.

¹¹ About the signification of the causative-conjugation of transitive verbs (see SETHE, *Verbum* I, § 356).

¹² The Egyptian *škh* compared with some hesitations by SPIEGELBERG (*Kopt Handwörterbuch*, 1921, p. 144) with the Coptic (B.) *σωκς*, *ἀποσκεινάζειν*, coincides surely *škh*, BRUGSCH, *Wörterbuch*, Suppl., p. 1139, which signifies "to cut off, to separate." Perhaps this *škh* has nothing common with *škh*—"to fashion metal."

¹³ In the same manner I would translate *škh* that we meet in Pap. Harris, pl. 34a, 14, 71a, 6.

¹⁴ Pap. Harris, pl. 71a, 4.

¹⁵ See W. GOLÉNISCHEFF, *Inventaire de la collection égypt.* (Ermitage Impér.), p. 331, No. 2286.

¹⁶ TH. HOPFNER, *Tierkult d. alten Ägypter*, 1914 (*Denkschr. Akad. Wis., Wien*, 57t., 2 fasc.), p. 114.

¹⁷ H. GRAPOW, *D. bildlichen Ausdrücke d. Ägyptischen*, p. 91.

¹⁸ VERNIER, *Bijoux et Orfèvreries* (Catal. gén. Mus. Caire), No. 52575, pp. 183-184.

¹⁹ F. v. BISSING, *Steingefässe* (Catal. gén. Mus. Caire), Nos. 18561-18565. [Also in XIIth dynasty U.C.]

²⁰ H. FECHHEIMER, *Kleinplastik der Ägypter*, Berlin, 1921, pl. 149.

²¹ See G. DARESSY, *Fouilles de la vallée des rois* (Catal. gén. Mus. Caire), No. 24669, pl. XXXII; W. WRESZINSKI, *Atlas z. altäg. Kulturgesch.*, No. 39a, 369; H. CARTER, A. MACE, *Tut-ench-Amun*, Leipzig, 1924, pl. 59.

²² *Ausführliches Verzeichnis d. äg. Altertümer* (Kngl. Mus. zu Berlin), 1899, p. 425; H. R. HALL, *Catalogue of Egyptian Scarabs*, p. xxxiv.

²³ P. E. NEWBERRY, *Egyptian Antiquities, Scarabs*, London, 1906, p. 88.

²⁴ BR. MEISSNER, *Grundzüge d. Assyrisch-Babylonischen Plastik*, p. 142, Fig. 238.



²⁵ J. KNUDZTON, *Vorderas Bibl.* II, Nos. 356, 357, and F. WEIDNER, *D. Zug Sargons von Akkad. nach Kleinasien* (Boghazköi-Stud. VI, 1922).

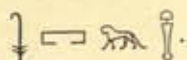
²⁶ *Bulletin de l'institut franç. d'Arch. orient.*, VII (1910), pl. I.

²⁷ W. SPIEGELBERG, *Ausgewählte Kunstdenkmäler d. ägypt. Samml. d. Univers. Strassburg*, 1909, pl. XIV, p. 57.

²⁸ *Ausführliches Verzeichnis.*, p. 427.

A WOOD STAMP OF THE HERMITAGE COLLECTION.¹ (Fig. 3.)

A LITTLE stamp (height 0·017m.) of light wood with a handle in the form of a small bow. On the shield (0·035 × 0·016m., 1·4 × ·6 inches) there are incised the following pictographs and hieroglyphs. Above is the king with the war cap on the head and in a long dress, sitting in a chair. In his left hand he holds a staff, and in the right one the whip *nhz*. Behind the chair is incised the hieroglyph ². The lower part is occupied by a pictograph of a wild-beast, a lion or a leopard. On the left side above him we see the hieroglyph of the house . The upper pictograph corresponds evidently to the hieroglyph "king,"³ and we could translate the inscription of the shield of this seal-stamp in the common hieroglyphic script, as in following manner:



"The first king's house of lion."

The dress of the king—his head-dress and his long gown—denotes the late New Kingdom. We find similar figures of the king on the scarabs of this period.⁴ On the seal's front there are left the traces of red colour. It is evidently the colour in which the stamp was placed before pressing it in the seal-clay.⁵

In order to determine the institution to which belongs our stamp, one must explain the nature of the beast in the pictograph of the stamp. If it is a lion, then we would have the evidence of the lion's houses, or, more justly, temples in Heliopolis and Leontonpolis about which are named by Aelian.⁶ These lions were sacred beasts of the sun-god, and the lion of our inscription would be the sacred animal of king-god. It might be, certainly, that in the "first king's house of lion" there is nothing sacred. This house of the lion might be only the place in which the tame lions were fed. We might remember, for example, the tame lion of Ramessu II, who escorted him in the fight.⁷


Although this identification of the pictograph of the beast upon the front of the stamp with the lion gives a sufficient sense to the deciphered inscription, one must admit that the pictograph is very little like a lion. The wild-beast has a head not big enough, his neck is too long and the legs are too long.⁸ With his small head, long neck and legs it resembles rather a leopard,⁹ called in Egyptian *sbj*.¹⁰ The leopards can be tamed.¹¹ In the inscription of the temple of Deir El Bahari above the two leopards we read: "two living leopards, brought as a wonder of the foreign country, for waiting on her majesty."¹² The tame leopards could be used at the hunt.¹³ Therefore, the first king's house of the leopard "might be a

dwelling, where the hunting leopards of the king were kept. If so, this house of the leopard could be like our zoological gardens, in which are kept divers wild beasts from foreign countries. This zoological garden was called "the house of the leopard," because this beast was a typical representative of foreign fauna. The existence of zoological gardens in Assyria is proved.¹⁴ Their existence in Egypt was surmised by H. Ranke,¹⁵ and it may be that the inscription of our stamp confirms this ingenious conjecture.

V. STRUVE.

NOTES.

¹ The stamp belonged to the collection of N. F. Romanchenko, and was delivered after his death with his whole collection to the Hermitage.

² The hieroglyph on the original resembled more the  than on the photograph.

³ Compare the inscription of the goddess *Šm·t* in an enigmatic inscription, published by K. Sethe in the work of the Marquis of NORTHAMPTON, W. SPIEGELBERG and P. E. NEWBERRY, *Report on some excavations in the Theban Necropolis during the winter of 1898-9*. London, 1908, p. 6*, l. 136.

⁴ P. E. NEWBERRY, *Scarab-shaped seals* (Cat. gén. ant. ég. Mus. Caire), pl. IX, Nos. 36658a, 37104.

⁵ H. BRUGSCH, *Aegyptologie*, p. 84.

⁶ XII, 7 (see HOPFNER, *Tierkult der alten Ägypter*, pp. 43-44).

⁷ L.D. III (see A. ERMAN, *Ägypten*, p. 332).

⁸ See the representations of a lion on the scarabs; for instance, NEWBERRY, *l.c.*, pl. VII.

⁹ See the representations of leopards, DAVIES, *El Amarna*, II, pl. 38; NAVILLE, *Deir-El-Bahari*, V, pl. 125; WRESZINSKI, *Atlas*, pl. 269, 334, 335.

¹⁰ Sometimes the leopard was named *šbj mḥw* (see SETHE, *Urk.*, IV, pp. 336-337); on the other hand, *šbj šmc* (see SETHE, *Ä.Z.*, 44, p. 19) of the leopard, who is known by his ferocity. But about a leopard's kindness, see KELLER, *D. antike Tierwelt*, p. 86.

¹¹ ERMAN-RANKE, Fig. 115 (p. 275), although WRESZINSKI, *l.c.* (pl. 175), identifies this beast with the cat.

¹² E. NAVILLE, *Deir El-Bahari*, V, pl. 125.

¹³ Hunt with leopards, WRESZINSKI, *l.c.*, pl. 396.

¹⁴ B. MEISSNER, *Babylonien u. Assyrien*, I, p. 73.

¹⁵ ERMAN-RANKE, *l.c.*, p. 275.

THE RULERS.

Vezier	820-831	Dignities	958-965
Viceroy	832-837	Chiefs, <i>heqa</i>	966-1004
Over all the land	838-848	Rulers, <i>her tepoa</i>	1005-1014
Over S. and N.	849-853	Conductors, <i>seshm</i> ..	1015-1023
Over S. or N.	854-875	Nome officials	1024-1031
Over old capitals	876-886	Orderers, <i>repot</i>	1032-1038
Peers, <i>uo</i>	887-893	Leaders, <i>hatio</i>	1039-1062
Mayors, <i>ur</i>	899-907	Nobles, <i>soh</i>	1063-1079
Council	908-916	Sidesmen, <i>ges</i>	1082-1085
Lords, <i>sar</i>	917-941	Conservators, <i>oz mer</i>	1086-1098
Elders	942-950	Town rulers	1099-1118
Fraternities	951-957		

THE highest functionary, the vezier, was chosen from different officials in successive periods. At first the royal sealer was the leader (820); then the royal axeman, or bodyguard, was the "first leader" (821). On the development of law the chief justice was the *thati* or husband of the country (822), a phrase like our "ship's husband"; to that was joined the prefecture of the capital, *mer nut* (823). The vezirate was subdivided as the territory increased, and there was a *thati* of the South (825) and of Heliopolis in the Delta (826), also of the Southern capital, Thebes (827), the "inner city." The vezier had a special relation to the *rekhyt* or land owners (828); he is also called "the vezier of the cities of Egypt" (829). The chief scribe and the gatekeeper of the hall of the vezier are mentioned (830-1). Another title which must have been equivalent is that of "head under the king" (832) in the IIInd dynasty; but this degraded, and seems to have been merely any holder of a royal commission (*Meir*, IV), and thus there was an expert attached to the office (833). A remarkable title of a vezier is *ari kher-o sebā re hemof*, "acting as a help in teaching of his majesty" (834); we cannot suppose *sebā* to refer to a gate, as no vezier would be deputy door-keeper. The explanation is that Pa-nehesi was vezier in the second year of the elderly Merenptah, and so may have educated Siptah who reigned 18 years later, or Sety II who reigned 24 years later, and under whom he was still vezier. Another vezier, Nefer-renpet, was over-head of the country (836), and the great Rekhmara was leader of the country (837). A frequent title is the governing of the land "to its limits, South and North" (838). The same term is in the intendant of the decrees in the land to its limit (839), and intendant of all things in this land to its limit

(840), and over-head (841-2). In the XIIth dynasty the royal prestige made this into "intendant of all things of the king" with the same phrase (843-4). Later the more popular view was "intendant, causing content in the land" (845-6), or "orderer contenting the land-owners" (847). A similar form is applied to the capital, lord of limits of the city (848).

Otherwise the South and North are named (849, 851), and, strangely, under Akhenaten the great Rames was *Atay*, or prince, of South and North (850), a royal title. There was a Controller of the Mayors of South and North (852), and a Controller of South and North in the *usekht* hall of the lordliness of the king (853). Later, the South alone was one man's charge (854-7), in its circuit (858). The vezier was ruler in the Southern nomes (859), or over the deserts of the South (860). The Southern agriculture, *māut* (861), was a special charge; the term suggests new cultivation, or intakes. The leadership of Southern cities (862) is named, and the Southern nomes of the interior (863), thus excluding the frontiers. The gate of the South, or of Elephantine, was an important control (864-6). The scribe of Thebes, and scribe over the seal of the chief messenger of the South, must have had a large staff under them (867-8). For Nubia the usual title was king's son of Kesh (869).

The office of customs and immigration was managed by the secretary of the gates of South and North (870), and an administrator of the king (871) suggests the same function. The rule of the North (872-75) was much less important than the South, which was so much open to raids by land or river.

The primitive capital of Nekhen, Hierakonpolis, was always honoured. The importance of it was shown by the monuments of the beginning of the Ist dynasty found there: the ruler of the opposite fortress of Nekheb (El Kab) was one of the highest titles from the IIIrd to the XVIIIth dynasty (876-80). This was sometimes combined with Nekhen (881-2), or Nekhen is named alone (883-4). The orderer of Nekhen (885) and of Pe (886) are titles which honoured the two capitals of South and North, Hierakonpolis and Buto.

The title *uo*, meaning a person that rules alone, a head of a tribe, was kept on from the prehistoric time, where the last of such independent rulers, the *uo she* or monarch of the lake, was conquered by Normer, as shown on the great palette (887). The usual early form is *uo ur*, great chief; as of the lake of Horus (888), or of the people of that lake (889). There was the *uo ur* of the *seh* hall of council, one of the hereditary councillors from the old principalities (890); the *uo ur* making the *rekhyt* to live (891); a *uo ur* excellent (892) or capable (893); and a *uo* over his horde or company (894). Further, the *uo* chiefs had a corporate house, with an intendant of the diwan of the *uo* house (895). All of these titles show clearly how important these local chiefs were, forming a peerage of the old families, and admitted as friends of the king of peerly rank, *semer uo*. They were directly under the king's orders, as there was a warden in the palace ordering the *uo* (897).

The *uru* or mayors were under organised control, with a head (899), or a controller (902-3), who was the vezier; more directly, the vezier became an *ur uru* or mayor of mayors (900-1). This accords well with the mayors being the great Council of Thirty of the Thebaid, immediately under the vezier as one of themselves, being mayor of Thebes. There was an intendant of the house of *uru* following the king (904), mayors who were attached to the Court. The *heru*, headmen, were probably a class of overseers, but they also were organised under a chief *her*; they were sent on expeditions (905-7).

- 820 𐎲𐎠𐎧 IDEN RT-I, XV^{XXV} 𐎲𐎠𐎧
- 821 𐎲𐎠𐎧 I, QA RT-I, XVII 𐎲𐎠𐎧
- 822 𐎲𐎠𐎧 (625) III P.M. XX 𐎲𐎠𐎧
- 823 𐎲𐎠𐎧 XII USUAL.
- 824 𐎲𐎠𐎧 XVIII REC XXVI, 83 𐎲𐎠𐎧
- 825 𐎲𐎠𐎧 XVIII REC IX, 37 𐎲𐎠𐎧
- 826 𐎲𐎠𐎧 XVIII N.R. 𐎲𐎠𐎧
- 827 𐎲𐎠𐎧 XIX B.T. V, 950-1 𐎲𐎠𐎧
- 828 𐎲𐎠𐎧 XXII P.H. N.N.
- 829 𐎲𐎠𐎧 P.5.217 𐎲𐎠𐎧
- 830 𐎲𐎠𐎧 MK.C 20184 𐎲𐎠𐎧
- 831 𐎲𐎠𐎧 II RTH, 165 N.N.
- 832 𐎲𐎠𐎧 VI A.5.XV, 210 𐎲𐎠𐎧
- 833 𐎲𐎠𐎧 XIX B. REC II, 74 𐎲𐎠𐎧
- 834 𐎲𐎠𐎧 B.M.
- 835 𐎲𐎠𐎧 XIX REC X, 130 𐎲𐎠𐎧
- 836 𐎲𐎠𐎧 XVIII N.R. 𐎲𐎠𐎧
- 837 𐎲𐎠𐎧 VI B.G. 𐎲𐎠𐎧
- 838 𐎲𐎠𐎧 IV-VL D-II, 88 𐎲𐎠𐎧
- 839 𐎲𐎠𐎧 XI L.D-II, 149 ce 𐎲𐎠𐎧
- 840 𐎲𐎠𐎧 XVIII N.R. 𐎲𐎠𐎧
- 841 𐎲𐎠𐎧 XXII P.H. N.N.
- 842 𐎲𐎠𐎧 C 20683 𐎲𐎠𐎧
- 843 𐎲𐎠𐎧 MK.C 20181 𐎲𐎠𐎧
- 844 𐎲𐎠𐎧 XVIII L.R. 314 𐎲𐎠𐎧
- 845 𐎲𐎠𐎧 Z.A.5. XX, 127 𐎲𐎠𐎧
- 846 𐎲𐎠𐎧 XVIII L.R. 253 𐎲𐎠𐎧
- 847 𐎲𐎠𐎧 XIX A.5.VII, 133 𐎲𐎠𐎧
- 848 𐎲𐎠𐎧 VI B.G. 𐎲𐎠𐎧
- 849 𐎲𐎠𐎧 AKINATN 2.A.5.XI, 127 𐎲𐎠𐎧
- 850 𐎲𐎠𐎧 B.M. STAT.
- 851 𐎲𐎠𐎧 XXV L.D-III, 259-67 𐎲𐎠𐎧
- 852 𐎲𐎠𐎧 A.5. XIX, 129 𐎲𐎠𐎧
- 853 𐎲𐎠𐎧 V M.M.D, 19 𐎲𐎠𐎧
- 854 𐎲𐎠𐎧 V L.D-II, 45-8 𐎲𐎠𐎧
- 855 𐎲𐎠𐎧 VI L.D-II, 112 b 𐎲𐎠𐎧
- 856 𐎲𐎠𐎧 XI L.D-II, 149 ce 𐎲𐎠𐎧
- 857 𐎲𐎠𐎧 XVIII 5BA, XXII, 32 𐎲𐎠𐎧
- 858 𐎲𐎠𐎧 XVIII L.D-III, 114 fh 𐎲𐎠𐎧
- 859 𐎲𐎠𐎧 VI A.5. XII, 97 𐎲𐎠𐎧
- 860 𐎲𐎠𐎧 XVIII REC XXVI, 83 𐎲𐎠𐎧
- 861 𐎲𐎠𐎧 XI L.D-II, 149 ce 𐎲𐎠𐎧
- 862 𐎲𐎠𐎧 VI L.D-II, 114 gh 𐎲𐎠𐎧
- 863 𐎲𐎠𐎧 VI A.5. XVII, 134 𐎲𐎠𐎧
- 864 𐎲𐎠𐎧 M.K.C 20240 𐎲𐎠𐎧
- 865 𐎲𐎠𐎧 XVIII P.5. 109 𐎲𐎠𐎧
- 866 𐎲𐎠𐎧 VI A.5. XVI, 195 𐎲𐎠𐎧
- 867 𐎲𐎠𐎧 A.5. XIV, 30 𐎲𐎠𐎧
- 868 𐎲𐎠𐎧 M.K.C 20562 𐎲𐎠𐎧
- 869 𐎲𐎠𐎧 SIN. 85 𐎲𐎠𐎧
- 870 𐎲𐎠𐎧 SIN. 26 ?
- 871 𐎲𐎠𐎧 III L.D-II, 17 𐎲𐎠𐎧
- 872 𐎲𐎠𐎧 IV L.D-II, 15 𐎲𐎠𐎧
- 873 𐎲𐎠𐎧 VI A.5. XV, 215 𐎲𐎠𐎧
- 874 𐎲𐎠𐎧 XVIII L.D-III, 62 𐎲𐎠𐎧
- 875 𐎲𐎠𐎧 XVII A.5. X, 194 𐎲𐎠𐎧
- 876 𐎲𐎠𐎧 V M.M.D, 38 𐎲𐎠𐎧
- 877 𐎲𐎠𐎧 VI A.5. XV, 212, 225 𐎲𐎠𐎧
- 878 𐎲𐎠𐎧 III P.M. XXVIII 𐎲𐎠𐎧
- 879 𐎲𐎠𐎧 XXVI B.M. 1225 𐎲𐎠𐎧
- 880 𐎲𐎠𐎧 XII REC X, 144 𐎲𐎠𐎧
- 881 𐎲𐎠𐎧 III P.M. XX 𐎲𐎠𐎧
- 882 𐎲𐎠𐎧 I Q.H. XXIX
- 883 𐎲𐎠𐎧 III P.M. X. 𐎲𐎠𐎧
- 884 𐎲𐎠𐎧 XII REC X, 144 𐎲𐎠𐎧
- 885 𐎲𐎠𐎧 III P.M. X. 𐎲𐎠𐎧
- 886 𐎲𐎠𐎧 MK.C 20539 𐎲𐎠𐎧
- 887 𐎲𐎠𐎧 XVIII L.R. 275 𐎲𐎠𐎧
- 888 𐎲𐎠𐎧 XVIII L.R. 252 𐎲𐎠𐎧
- 889 𐎲𐎠𐎧 " " " 𐎲𐎠𐎧
- 890 𐎲𐎠𐎧 M.K. P.5. 270 𐎲𐎠𐎧
- 891 𐎲𐎠𐎧 XVIII L.R. 85 𐎲𐎠𐎧
- 892 𐎲𐎠𐎧 A.5. IV, 209 𐎲𐎠𐎧

The Council, *zazat*, was for legislation, under the king, see the "intendant of the royal Council of all words of judgement" (908). It dealt with the whole land South and North, and so differed from the judicial councils of the Thebaid, Middle Egypt, and the Delta, which divided the work, and in which the king had no part, as he was legislator but not judge. The title *zat* (915-6) looks as if it was a councillor, but this is not generally recognized.

The lords, *saru*, were a very important body, acting as rulers of the nomes (923), and forming the judicial council of Middle Egypt (921). The name is found spelled with either *s* (917). They had a chief in the vezier, over-head of *saru*, or *sar* of the *saru* (919); while in the other direction they were closely connected with the *rekhytu*, or landowners (923). Hence they were probably the greatest landowners of the nomes, and so were "leaders of the *rekhytu*" (923-4). The intendant of the *saru* was lord of judgement (922), belonging to the Council of Six. The *saru* judged the chiefs of the nomes (*Meir*, IV, 25). There is also the title "powerful among the *saru*" (925). In the Ist dynasty the same figure is used, pointing to a controller of *saru* (928-9), the latter being of Ap, which with the *uas* sign can hardly be other than Thebes. Unhappily the early history of Karnak has been dug up and lost in recent years, so that the status of Thebes in the Ist dynasty is unknown. In the XVIIIth dynasty there was a *sar* of Thebes (930), and also of Memphis (931-3). At first sight the title *sar* of the stable (934) seems inconsistent with the dignity; but it would be parallel to the "master of the horse" appointed by the first dictator of Rome, and by 218 B.C. raised to equal command with the dictator (Livy, XXII, 25), and a large department of our own Royal Household is that of the "master of the horse," held by an earl, just as a lord was head of the stable in Egypt. The head *sar* of his majesty (935) may have been equivalent to the lordly title of "gold stick." Such a title lasted to the XXIIInd dynasty, as one was "great *sar*" of Usarkon I (937); perhaps equal to a "great *sar* among the leaders" (936). It is remarkable that in the IIIrd and IVth dynasties the daughter of a king was a *sart*, or Lady (940-1).

So far there is good evidence for the figure of the man with a staff representing a *sar*, but in other and later cases such is distinctly termed *semsu* or elder (944-5), of the *hat* or *hayt* council. Was this a later name for the same dignity? For the judgements of the *saru* were issued in the *hat* hall (613), which is a variant (944) of the later *hayt*. The position of the *semsu* of the *hayt* was connected with a sanctuary (947), and also with a dockyard (948) and a tomb (949); but it may have degraded in time like many other titles.

There are traces of other public bodies, as the scribe of the assembly, *sesh sehuu* (951), the scribe of the company, *smayt* (952), and the fraternities devoted to maintaining some great tomb, the elder of the *sennut* or brotherhood (953), the *sennu* of the eternal house (954), or eternal *sen* (955). The *ast meru* (956) may be the dwelling of the serfs; *ast mdot* is, however, a funeral title (957).

There was a class of royal nobles, *nesut sheps* (958-60), which was in high honour in the Vth dynasty, then greatly degraded in the VIth, but appears as a vezier's title in the XIXth. No officials or organisation of this class are named, so it seems to have been purely honorary.

The word *aaut* (961-65) has been variously rendered dignity or office: the titles "advancing *aaut*" (962), and intendant of all *aaut* of the South and North (964), certainly imply attention to dignity of position, as by our Earl Marshal, rather than offices of employment. There was also a controller of all dignities for the king (963), and the ubiquitous Senmut "established the dignities in the

- 898 𐎔𐎕𐎗𐎕𐎗𐎕𐎗 XVIII L.R. 314 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 899 𐎔𐎕𐎗 V B 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 900 𐎔𐎕𐎗 VEZIER MK.C.20539 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 901 𐎔𐎕𐎗 XVIII L.R. 104 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 902 𐎔𐎕𐎗 MK.C.20539 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 903 𐎔𐎕𐎗 XIX B.T.V. 950 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 904 𐎔𐎕𐎗 MK.C.20735 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 905 𐎔𐎕𐎗 XII SIN.85 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 906 𐎔𐎕𐎗 XII SIN.136 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 907 𐎔𐎕𐎗 IX-X C.20431 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 908 𐎔𐎕𐎗 IV M.M. B.16 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 909 𐎔𐎕𐎗 A.S.1,266-82 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 910 𐎔𐎕𐎗 XXVI T.STAT.3020 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 911 𐎔𐎕𐎗 SIN.103, XII P.S.86 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 912 𐎔𐎕𐎗 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 913 𐎔𐎕𐎗 XII SIN.137 N.N. 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 914 𐎔𐎕𐎗 SIN.92, LIST OF COUNCIL 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 915 𐎔𐎕𐎗 V S.U.1, 118 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 916 𐎔𐎕𐎗 VI P.A.B.11, XIX 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 917 𐎔𐎕𐎗 V SIN.13, 112 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 918 𐎔𐎕𐎗 XVIII L.R. 104 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 919 𐎔𐎕𐎗 XXII A.S.XVI, 177 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 920 𐎔𐎕𐎗 L.N.23 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 921 𐎔𐎕𐎗 V.S.U.1, 87 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 922 𐎔𐎕𐎗 XI L.D.11, 149 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 923 𐎔𐎕𐎗 MK.C.20538 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 924 𐎔𐎕𐎗 MK.C.20526 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 925 𐎔𐎕𐎗 C.20539 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 926 𐎔𐎕𐎗 XII N.B.H. 1, 18 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 927 𐎔𐎕𐎗 XXII REC.XXII, 52 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 928 𐎔𐎕𐎗 I R.T.1, XIX, 9 N.N. 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 929 𐎔𐎕𐎗 I R.T.11, 160 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 930 𐎔𐎕𐎗 XVIII Z.A.S.XXI, 127 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 931 𐎔𐎕𐎗 L.A.E. II 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 932 𐎔𐎕𐎗 XVIII L.D.11, 29e 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 933 𐎔𐎕𐎗 R.C. LXVI, 4 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 934 𐎔𐎕𐎗 XIX A.S. X, 132 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 935 𐎔𐎕𐎗 B.M.SARC.967 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 936 𐎔𐎕𐎗 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 937 𐎔𐎕𐎗 A.S. XV, 141 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 938 𐎔𐎕𐎗 A.S.V, 73 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 939 𐎔𐎕𐎗 L. V, 14 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 940 𐎔𐎕𐎗 (DAU.SNEFRU) III L.D.11, 16 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 941 𐎔𐎕𐎗 (DAU.SHEPSESKEF) IV L.N. 17 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 942 𐎔𐎕𐎗 M.K. C.20086 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 943 𐎔𐎕𐎗 P.S.89, 141 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 944 𐎔𐎕𐎗 G.W.T. 147 N.N. 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 945 𐎔𐎕𐎗 PTOL. A.S.XVII, 92 N.N. 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 946 𐎔𐎕𐎗 V. L.248 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 947 𐎔𐎕𐎗 F.2553 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 948 𐎔𐎕𐎗 VI MEIR IV, XII 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 949 𐎔𐎕𐎗 A.S. XII, 142 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 950 𐎔𐎕𐎗 M.M. D26 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 951 𐎔𐎕𐎗 XX BERL 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 952 𐎔𐎕𐎗 M.K. C.20088 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 953 𐎔𐎕𐎗 M.M. D38 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 954 𐎔𐎕𐎗 VI MEIR IV, 5 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 955 𐎔𐎕𐎗 IV L.D.11, 28 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 956 𐎔𐎕𐎗 A.S. VIII, 254 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 957 𐎔𐎕𐎗 A.S. VIII, 256 N.N. 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 958 𐎔𐎕𐎗 V DESH, XXVIII 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 959 𐎔𐎕𐎗 VI L.D.11, 110 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 960 𐎔𐎕𐎗 XIX M.A.B.11, 56 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 961 𐎔𐎕𐎗 M.K. C.20531 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 962 𐎔𐎕𐎗 M.K. C.20539 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 963 𐎔𐎕𐎗 XVIII L.R. 252 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 964 𐎔𐎕𐎗 XVIII L.D.11, 29e 𐎔𐎕𐎗𐎕𐎗𐎕𐎗
- 965 𐎔𐎕𐎗 L.R.105 𐎔𐎕𐎗𐎕𐎗𐎕𐎗

palace to give knowledge to all men following him" (965), thus firmly regulating the Court of the XVIIIth dynasty.

The title *heqā*, or chief, is illustrated by Amenhetep III being chief of chiefs (966). The most usual early instance of the title is as chiefs of the palace, or *mudiriye*, in each nome, held by Amthen or Pehernefer; these can be identified as the XVIth nome of the Delta (967), the VIIth (968), probably the XXth (lake of the Asiatics, 969), the Fayum (970), the West and East (971), the XVIIIth of Upper Egypt (972), and others as the great lake (973), the lake of the jackals (974), perhaps the XVIIIth of the Delta (975), the VIth (976), the Fayum (980), XIIIth nome of Delta (981), perhaps the XIXth (982), and the XVIth of Upper Egypt (986). There are also palaces named of King Qa (977-8, 985) and of the Queen of Khofra (983), and later of Teta (987) and Pepy (988).

There are honorific phrases of "gratifying the towns" (989), "in the young (new) towns" (990), and "himself going round the towns" (991), also of the agricultural land (992) and the nome (993). In the VIth dynasty there was a chief of the palace next under the king (994), and in the XIIth an excellent chief of the new towns (996); *āq* seems by the determinative to be a variant of *aqer*. Of much lower grades were chiefs of a mastaba (997), and of "house of the body," or tomb (998). How low the term went is shown by the seven *hequ*, village chiefs, or *omdehs*, kneeling before Pepy-onkh (1000). There was also a chief doing service (1002), and a follower and a servant of a chief (1003-4).

A later title for the head of a nome in Upper Egypt was ruler, *her tep oā*, which occurs for the IIIrd nome (1005), also for the IXth, XIIth, XIIIth, XVth, and XVIth nomes (1006-10), also generally of the Southern nomes (1011-12), and of the gate or frontier (1014).

The conductor of a nome, *seshem*, was perhaps an alternative title, as it was of high rank, the great Senmut being conductor of all the *rekhytu* (1019). It belonged to Middle Egypt, the XVth, XVIth, and XXth nomes being named (1015-17), and the cities of the interior about Deshasheh (1018). Senmut was also "conductor of all art" (1031), so perhaps "director" would be a nearer equivalent, though the word is literally "to cause to go."

Among unusual titles is a warden of the house of the chief of Athribis (1024); a lord of Athribis (1025); an intendant of the guards of a nome (1026); an intendant of the religious centre Behudet (Edfu) (1027); scribes of nomes (1028-9); the keeper of the great lake, Fayum (1030); also a keeper of the great lake of Oxyrhynchos (1031), which is too far south to refer to the Fayum; yet we do not know of any lake at Oxyrhynchos, the desert is too high, and the Bahr Yusuf, which is ancient, seems to preclude any lake there. It may refer to the lakes formed at high Nile between the sand dunes south of that city.

The familiar title, *repot*, "orderer of the people" (1032), is found in all periods. Though usually belonging to the chief of a nome, it could be applied widely, as "in all the land to its limit" (1034). It is often found in a feminine form (1036-37). The gatekeeper of the goddess *repotet* is named in 1038. The title of leader, *hati-o*, which usually goes with the previous, seems to belong to a corporate body of chiefs, as there was a leader of the leaders (1040-1). The earliest instance is a leader of Seka in the Ist dynasty (1042); there are next leaders of various nomes, the IIIrd, IVth, Erment and Thebes (1044-45), VIIIth (Abydos (1050), and Thinis (1046-47), the XIIth and XVIth nomes of Upper Egypt (1048-49); the IXth of the Delta (1050) and perhaps the XVIIIth (1051). A general title in the official list of late times is leader of all the towns and settlements (1052). The leader of

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Zaru on the N.E. frontier was captain of archers (1053). The Ramesside vezier Ra-hetep was "leader in the leading of the *rekhytu*" (1055), and Ramessu himself was intendant of the leaders of towns (1058). An unusual phrase is the diwan of the household of the leader (1060), with which may be compared 895. A woman was leaderess of the daughter "of the chief," apparently a governess (1061).

An interesting title is that of the *soh*, noble, figured by a gazelle with a pendant hung round the neck. The name is attested by titles 1063, 1064. The pendant itself was *soh*, meaning "marked out." It looks as if this was connected with *seh*, council hall, and *sehu*, to assemble. Evidently the *sohu* were a very high class of persons, as the title was held by the nobles of Beni Hasan. The great Senmut was a *soh sohu*, which shows that they were an organised body with a chief (1065). The earlier vezier Antefaker was head over all the *sohu* (1066). The *soh* was over the companions, *semeru* (1067). The title was hereditary, as there was a "*soh*, excellent and glorious more than his fathers who begat him" (1068). An important custom is shown by the title "making flame for the first of the year for the *soh*" (1069); thus they were connected with the renewal of fire at the new year, a ceremony perhaps belonging to the new year's king of all the nobles (*sheps*), see ANCIENT EGYPT, 1924, p. 97. This was certainly a primitive custom, and points to the *sohu* being a class of nobles from prehistoric times. The form of the necklet (1070) is that of the well-known cylinder seal on a necklace, indicating that these nobles were distinguished by wearing a cylinder seal, which was a rare object in late prehistoric times. Other titles are: establishing the doings of the *sohu*, great among the *sohu*, receiving his *sohu* for the king (1071-2-3). Other titles are less clear, and may therefore help in settling the functions when we can understand them. "Intendant of the temple of Khent-khati among all his *soh* in all his dwellings" (1074); why was this god specially connected here? "A sword which is only of the *soh*" (1075); were swords only carried by these nobles? "A *soh* great in travels" (1076) connected with his putting the fear of the king upon the foreigners (see *qedt*) to circulate or travel. "*Soh* great of years in the house of Amut," a form of Horus (1077), again a religious connection. "Great in his dignity, great among his *soh*" (1078). "Examining the following at all his *soh*, at all his *saru*" (1079); this proves that the *soh* nobles were not *saru* lords, but that both classes kept bodies of retainers who were inspected, perhaps with a desire, like that of Henry VII, to stop the growth of a feudal militia. The whole view is that of hereditary nobles with bodies of retainers, travelling on royal business, received periodically by the king; the organised body meeting probably in a council hall, and distinguished by a cylinder seal badge; concerned with religious rites, and the renewing of fire at the New Year.

The title of warden, *oš*, is otherwise placed along with the subjects to which it refers; there are two general titles, the vezier Heremheb, before being king, was "a warden unto the wardens" (1080), and there was a "warden of documents in the office of land" (1081). The scope of his title as warden has been already stated, ANCIENT EGYPT, 1924, p. 111.

A curious title is that of *ges*, and as two veziers were intendants of the house of *gesu*, it was of importance, and probably connected with the vezier. This, and the name, suggests that they were the "sidesmen" to act as agents for the vezier, waiting at his side for orders. There was a *ges* house of the West (1082), and the title continued until the XIIth dynasty (1083-85).

A very important office in early times was the *oz mer* (1086), from the Ist to the VIth dynasty. *Oz* means "in good condition," hence the derived senses

of "unhurt" and "fat." It was confused with *od*, "to traverse" or "cut through." The direct meaning of the title was "conditioning the waterways," like our Conservators of the Thames. It implied the care of cleaning the canals and keeping the river clear, an essential duty for the productivity of the land. The position of Methen agrees with this, as he was *oz mer* down the whole west side of the Delta, in nomes II, III, IV, V, VI, VII, VIII, and only elsewhere at Mendes, the XVIth (1089-95). Later the ship appears (1096) denoting a navigable stream, also the place known as "praise Horus, leader of heaven" (1097), and Buto (1098). The title was very usual in the Ist dynasty, from Zet onward (1086-8). It has the determinative of a hoe, referring to the digging out of the canal (see *Hierakonpolis*, xxvic, 4, 8).*

There are several disconnected titles belonging to towns. The head man of the towns of Egypt, and the foreign lands (1099). The leader of Thebes (1100, 1101). The great inspector visiting the towns (1102), and returning to the city (1103). Intendant of new towns (1104). Chief of the palace of the controllers of towns (1105). Controller of every town (1106). Controller of feeding the town (1107). Controller of Heliopolis (1108). Scribe of Memphis (1109). Intendant of the temple of Sebek in the land of the South lake, Fayum (1110). Controller of the city in the XIIIth nome, Siut (1111). Intendant of all the South towns (1112). Chief messenger of the city (Thebes) (1113-14). Scribe of the city (1115). The chief keeper of the gate of Memphis (1116). In charge of the Gate of Memphis (1117), over the roads (1118). The organisation of the country that we can glean from these titles seems to have been as complete as in any later period, and to have exceeded that in any other ancient civilisation except that of Rome. This genius for order is what gave Egypt the strength of continuity which distinguished it.

FLINDERS PETRIE.

REVIEWS.

Althebräische Inschriften vom Sinai. Alphabet, Textliches, Sprachliches mit Folgerungen. Verfasser: HUBERT GRIMME, o.-Professor der Semitischen Sprachen an der Univ. Münster i.W. 1923. Folkwang-Ferlag G.M.B.H. Darmstadt Hagen i.W. Gotha. 99 pp. 11½ x 9.

The general title of the series to which this publication belongs is *Schriften-Reihe Kulturen der Erde. Material zur Kultur-und Kunstgeschichte aller Völker. Abteilung: Textwerke.* *Althebräische Inschriften vom Sinai mit 23 Bildertafeln, eine Schrift-Tabelle und Zahlreichen Abbildungen im Text.* The present work deals mainly with the inscriptions found at Wadi Maghara and Serabit-el-Khadem, the old Egyptian mining district of the S.W. mountain-range. The author points out that it was from this district that the Pharaohs obtained the copper and the turquoise which were its most precious products. Here at a remote past was founded the well-known temple dedicated to Hathor, "the lady of turquoises." To this was added a cavern-shrine dedicated to "Sapdu, lord of the eastern desert," "smiter of the mountaineers." This always stood in close relation with the city Pi-Sapdu in the land of Goshen.

The volume begins with the Berlin head of Hatshepsut, the first picture

printed on page 1, on the back of whose leaf (page 2) is the above-quoted general title of the series. This is described as a portrait (a statue) of the well-known queen Hatshepsut (*Hjatschepsut*)—a name which corresponds, if rightly read, to six or seven letters of the sign-list which forms the main subject of this book.

Noteworthy is the fact that, though roughly, the letters, as in the name of Joseph, fall in the right places in the strange hieroglyphs which Professor Grimme expounds. Noteworthy, too, is the fact that the first element of the queen's name appears as though pronounced *hyat* (very possible and probable), and the final element as *su* instead of *sut*, in accordance with a very common rule (like *Iset*, Babylonian *Isi*, the goddess *Isis*). Notwithstanding the probability of these readings, however, we have to admit that they are by no means so convincing as in the case of the Persian wedge-formed characters dealt with by Grotefend and Sir Henry Rawlinson. In the Persian texts the names read in were those of the ruler who had had them carved, his father, and his grandfather—a triple test with the advantage of a chronological basis, which is absent here.

Comparisons between the old Phoenician characters and Egyptian have already been made, but the changes which the older characters, whether hieratic or demotic, would have had to undergo were so great that there were but few who felt themselves justified in accepting them. The present study, in which Professor Grimme sets forth his views, however, has necessitated a return to this source of information for their derivation. The differences, however, are noteworthy. Thus *aleph* is derived either from the Egyptian cow's head or the whole animal, and is explained as coming at the head of the alphabet because these are the emblems of Hathor, the goddess of this site. *Beth* comes next in order because it is derived from the hieroglyphics for "house" and for "palace," the residence of the king. *Gimel*, if the author be right, is not the picture of a camel, but is the rectangle standing for "temple-staff" (*qnbt*). The changes which this would entail, however, seem to make this identification improbable as far as the Phoenician forms are concerned. *Daleth*, which used to be explained as a triangular tent-door, is given as originating in the ordinary Egyptian house-door, probably pronounced "o," but the substitution of the Semitic form for the Egyptian would be a natural change. *Nun*, on the other hand, is not a fish, but a water serpent or an ordinary serpent, *det*. The value of *n* came from the Semitic *nahas*, but the derived forms are not good imitations. *Samech*, in like manner, is the Semitic name of the Egyptian *an*, the usual word for "fish," but from this the Phoenician letter differs considerably. Whilst admitting, therefore, that some of the comparisons are exceedingly good, exception may justly be taken to those which differ—and if we accept this view, the question naturally arises: Is the chain in any part stronger than its weakest link?

To sum up, there seem to be good comparisons on the Egyptian side, but on the old Hebrew or Phoenician side one may justly have doubts.

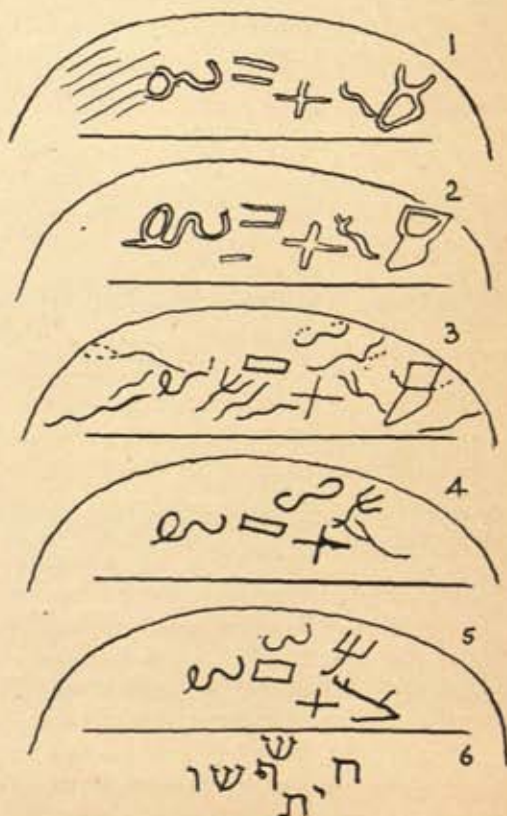
But this does not say that the language of these inscriptions is not Semitic—perhaps it is, for this peninsula is regarded as having been the home of the Semites. The names *Hyatsepsu* and *Yoseph* suggest that certain characters *may be* correctly identified, and if these, then probably many others as well. Among the best comparisons is the sign for "water," though how, in the Phoenician form, the wavy line has a long tail (lost in the form which we ourselves use every day) on the right, is not clear. The eye as the original form of *ayin* is an old friend, and may be regarded as correct, but was an Egyptian hieroglyph the origin of this character?

The plates include an excellent plan and model view taken from Petrie's "Researches," of "the Hathor-Sapdu-Temple on Serabit-el-Hadem, the place where the votive gifts with the old Hebrew inscriptions were found," and there are also two other views. The pictures of the statues and slabs bearing the inscriptions are also good. In the main, the figures are in the Egyptian style, and show considerable skill in stone-carving. (Is this what we have to expect from the Hebrews?) The work may, however, have been executed by Semites who had studied under Egyptian masters.

The author emphasises the difficulty as well as the importance of the study of these inscriptions, and seems to appeal for the reader's indulgence. Every fair-minded man will assuredly accord him this, and in England there is no feeling among Orientalists that German research is to be boycotted. Moreover, a successful discoverer cannot be deprived of the credit which is due to him. (How far the declaration of pains and penalties on page 4 may have affected sales outside Germany cannot be estimated.) In the present case, the author of this notice hopes that Professor Grimme has found out the true solution of the riddles of these inscriptions, but fears that another solution, at least in part, must be sought. If he has solved their riddles, Professor Grimme takes his place automatically with Champollion, Grotefend, and other great solvers of riddles like unto those of the Sinaitic inscriptions in the past.

T. G. PINCHES.

[The critical question is how far the proposed connections are clear and certain, especially that of the name of Hatshepsut; the stages of comparison of that name are therefore set out here. 1. is the drawing as first made from the stone on a dry squeeze. 2. is the same with such additions of Professor Grimme as may be verified in photograph, and in the decayed state of the stone I could not vouch for more. 3. is the text as set out by Professor Grimme. 4. are the signs claimed to be the name of Hatshepsut. 5. show the normal forms of the claimed signs as carved elsewhere. 6. are the Hebrew equivalents of the signs of 5. Hit sh p shu. The first two signs in 3 are taken as *an*, "I am," and the concluding signs as *khn m a m n*, "Khnum Amen"; but the condition of the stone seems to preclude any original surface being still there. Neither the ordering of the signs, nor the equivalence, seem convincing. F. P.]



Études de Nautique égyptienne. L'Art de la Navigation en Égypte jusqu'à la fin de l'ancien Empire. 1^{er} fascicule. Par CHARLES BOREUX. 4to. 240 pp. (Cairo, Institut Français d'Archéologie orientale.) 1924. P.T. 170.

This is the first section of the first volumes of a colossal study of all the material bearing on the making and use of shipping in Egypt. Seventy-four blocks of illustrations in the text serve to show all the important material and varieties. The partition of the subject here is an eighth on Naqada, another on Hierakonpolis, a quarter on early Abydos; on the Old Kingdom a quarter is literary, and a quarter on the papyrus boats. The wooden ships are only touched upon at the end with a sentence broken, awaiting the next fascicule.

The question of the earliest age of boats is referred to the beginning of the Neolithic Age; but clay models of boats are in the Badarian period, which is probably much earlier. It is unfortunate that in this early section the models and drawings issued four years ago in *Prehistoric Egypt* have not been incorporated; many canoes there with in-turned ends, the earliest figure of a galley, and the glazed quartz models of a papyrus boat, built up of many blocks, all add to our ideas. The discussion of the details of the ships is careful and reasonable, and avoids the various misconceptions which have been put forward by other writers. The gradual growth of the cabins in size and complexity, and the opposite types of the prehistoric and the invaders' ships, are well stated.

Some incidental remarks raise outside questions, such as the "nègres autochtones," presupposing negroes outside of tropical conditions; or the vases with ship paintings being due to people from Punt, instead of the dynastic race being from there. The sign of *shemsu* is discussed (in sixteen pages) without regard to the detailed drawing in Turin, which seems to show the follower covered by the great hunting shield on his back, with knife in hand and one leg advanced, walking. It has no connection with the harpoon, *uo*, with which it here seems to be identified (p. 88). The query about the direction of the ships in *Deshasheh* is answered by pls. I and III, showing the boat of Sheda going north; while the boat of Mena is named as being on a loose board of wood, formerly hung up elsewhere, so that it cannot indicate direction.

The frequent scenes of fighting among boatmen are well explained as tournaments in festivities held on the water; the wreaths of flowers worn by the men in many instances fairly prove this. The various subsidiary remarks and discussions, though not essential to the shipping, are all of value. Where such a complete work is intended it might be well to have some co-operation in order to ensure gathering all the material. Even so, fresh discoveries will always leave collective works behind-hand. It is to be hoped that this series of studies will be thoroughly completed, as such comprehensive works are needed for the advance of Egyptology.

Les Races et l'Histoire. By EUGÈNE PITTARD. 8vo. 619 pp. 1924. (Series of *l'Evolution de l'Humanité*, 78 Boulevard Saint-Michel, Paris. 20 frs.)

The series to which this volume belongs is much needed, and would be welcomed if it summarised recent discovery. The volume by de Morgan was unhappily far out of date (ANCIENT EGYPT, 1921, p. 116), and now in the present volume the twenty-eight pages devoted to Egypt only give the point of view of thirty years ago; the most fruitful period of anthropological work in Egypt is

entirely ignored in a book dated 1924. Not only is English work unknown, but the most fundamental evidence of the Gebel Arak ivory, published by the Fondation Piot in Paris eight years ago, is never mentioned.

To begin with, there is Champollion's description of the four races, with the misreadings of his time, and the Tamehu called Europeans, instead of Libyans. Most of the known skulls are said to be badly dated; but that material was not a twentieth of the well-dated predynastic skulls alone, and there are nearly as many well-dated dynastic skulls, now known. The latest writers quoted on the subject are Mariette, Broca and Chantre, all useless to quote at the present time. The knowledge which we have from archaeology, history and art, of the many migrations into Egypt, is ignored, and only vague old surmises are mentioned. A long account is given of Lenormant finding flint implements, but no hint of the present knowledge of the subject, and "a chronologic parallelism is impossible" with Europe, although we have now the same definite order of periods established in Egypt as in Europe. The prehistoric civilisations, now so fully known, are scarcely mentioned.

All through the account, the old idea of an unmixed Egyptian race is prevalent. A question is put whether the royal family of the XVIIIth dynasty belonged to the "primitive Egyptian race"; we might as well ask whether George III was a long-barrow man. Such enquiries are futile, when we can point historically to a continual flux of men who were Aurignacian, Solutrean-Caucasian, Libyan, Eastern, Punite, Elamite, Sudani, Syro-Mesopotamian, Galla, Mesopotamian, Berberi, Syrian, Ethiopian, Libyan, Greek, Arab, Tunisian, Kurd and others. Most of these peoples in the earlier ages committed heavy slaughter, which implies large numbers coming into the country. At about the Ist dynasty, at least five markedly different races were all mixing and fighting in and around Egypt.

In the preliminary discussion there is the same ignoring of the historic facts of race mixture. Yet even in our own day, without any great slaughter as in antiquity, we can see a large population sprung up in a century or two from the French and Canadians, from the Dutch and Javanese, from the Boer and South Africans, from the English and Indians; in other cases, lower races have been almost or altogether exterminated, as the Caribs, Tasmanians and Australians. In these pages on Egypt we might have looked for an outline of the great and continuous ethnologic changes, and the variations of skull and stature that have been published, instead of vague remarks with many notes of exclamation.

The real need of Anthropology at present is to determine the extent of the separate influences of environment and of descent. Till that is done, all talk about race is in the air, so far as measurement is concerned; at present history and art are all that we can trust to for conclusions.

Museum of Fine Arts Bulletin. April, June, 1925.

In these parts there is a summary of Dr. Reisner's work. In April is described and figured the tomb of Adu (Iduw), with the owner seated cross-legged with extended arms to receive his offerings. In June is an outline of the Nubian work of the last two years with many welcome illustrations, including the Semna fort, now cleared. There is also some account of the Gizeh work, and the surface details of the tomb with the name of Sneferu.

Gold and Silver Jewelry and related objects. C. R. WILLIAMS. (New York Historical Society.) 4to. 281 pp. 38 plates. 1924.

This is much more than a catalogue of the valuables belonging to the Society, it is a work of research in the authorities on each branch of the subject; it has also very full references in the numerous notes, so that it may serve as a working bibliography. For all this students will thank Dr. Williams for her elaborate care.

The nature of the objects of decoration is described, followed by the sources of the gold and other materials; the alloys of gold and silver; the nature and production of granulated work, which, after experiments, is concluded to have been fixed by incipient fusion without solder; and the production of wire, by drawing a coiled strip of sheet metal. The detailed catalogue describing all the separate objects follows, with ample references to parallels in other collections and publications. The photographs give not only all the objects, but also a larger magnification of the technical details which are discussed. It is difficult to see how the treatment of the subject could be made more complete.

A few details naturally occur to anyone with different experience. The two pectorals of Lahun are certainly of far different execution, and the artificial paste or glaze inlaid in the later ones is like that in the bracelet clasps of Amenemhat III. As a question of art there is an interval in the style which might well be a century or more. The absence of much wear can only show that a soft cord was used for suspension. The reference to the glass of prehistoric age has no relation to Egyptian manufacture; all the glass before the XVIIIth dynasty was foreign. For the original of cylinder cases see the cylindrical rolls of papyrus—dummy charms, hung by neck-cords as poor amulets (*Amulets*, 131, *a, d*), and the cylindrical cases used till modern times. With the fly badges should be noted the large ivory flies found in Middle Kingdom tombs. Among instances of pierced ears, Akhenaten should be named. Some of the pennannular rings have so small a slit that only hairs could be passed into them; such seem to be for confining the tresses of hair. The wheel was used for cutting scarabs in the XIth dynasty, and was general in later times. Some hopeless remarks are quoted about powdering turquoise for colour; the colour would be decomposed by heat, and be far too pale if used otherwise. Among "outstanding jewels" might be named the gold ring of Amenhetep I from his tomb; and the gold ring of the prefect under Antoninus; also the silver-plated heart scarab of Akhenaten, all at University College. The interesting system of burnishing a thin gold coat over a core of limestone, or paste, is not mentioned; it was used in prehistoric work, and in Roman bracelets, perhaps also between. Our best congratulations on the production of a well-prepared and finely-issued volume.

Académie des Inscriptions, Comptes Rendus. Jan.-Feb., 1925.

Les Fouilles de Byblos en 1924. PIERRE MONTET.

Four great tombs have been found and cleared; all had been robbed, probably in the VIIth century. Most of the tombs were merely cut in the clay ground; only one of the nine now known was in the rock. One of the new tombs had a stone sarcophagus; the lid lay flat on it, and had two projections on each end as handles, like the Egyptian pattern. In this were pieces of blue and white faience, probably part of a winged disc from the wooden coffin now decayed. In another

tomb were two pieces of alabaster vessels, inscribed with cartouches, (1) " Prince of Kepni, Ab," (2) " Ab-shemu living again."

Hand-made pottery jars have been found ; some are certainly before the XIIth dynasty, as one tomb of that age had cut through an earlier grave, with a jar. The large jar has three triangular handles near the neck, and three lower handles : thus the handle is early Syrian, though always foreign in Egypt. There are also flasks with one or two handles ; one has hatched pattern on the shoulder. Other tombs full of pottery have been found with bronze weapons, and apparently figure vases of red, polished pottery, like those in Egypt. The whole of this material should be published. The natives have obtained from the temple many scarabs, and part of an offering table of Pepy in alabaster ; these have been saved by a private collector, but other things have reached the Cairo dealers. The position is most unsatisfactory, due to the lack of proper payment by the authorities.

L'Age de Cuivre en Égypte. Par E. NAVILLE. 8vo. 20 pp. (*Revue Archéologique*, 1924.)

This paper mainly deals with the meaning of the word *uasm* or *asem*, which is usually rendered electrum (silver-gold alloy), but which the author suggests was another kind of copper, besides the well-known *khemt*. This *uasm* is here quoted from the XVIIIth dynasty, but it is named in the Ist dynasty as the material of an offering-bowl (*Royal Tombs*, II, x, 2). The argument that *uasm* was a kind of copper rests upon the large amount recorded, as " one does not see whence one could obtain such a quantity of gold." The quantity in question is the total offering made at Thebes by Hatshepsut, with which we may compare the supplies recorded in the next reign. The amount is best realised by stating it in money value. Hatshepsut dedicated £450,000, if of pure gold, or perhaps £350,000, if alloyed. Now the detailed records of tribute of Tehutmes III state in a single year from Nubia and Syria £48,000, or more than an eighth of the *uasm* named by Hatshepsut. Even much later, after Syria was bled to death, Ramessu III gave £120,000 of gold to Amen, beside offerings elsewhere ; and this was only a tenth of the *annual* tribute of gold of later times to Persia. So there does not seem to be a difficulty about such amounts of gold alloy being devoted to sacred purposes once during a splendid reign.

For adorning obelisks there was the cap on the top, and as this *benben* was the essential part, and the shaft only a support, the obelisk would be termed clothed if the *benben* was covered. It would be impossible to hold up strips or plates of metal on the upright face, without rivet holes, of which there are no traces ; if the shaft was overlaid, it could only be with thin gold-leaf cemented on, which would not require a vast amount. On the *benben* of Hatshepsut's obelisks the covering of the plain part above the sculpture would be only a fiftieth of the total quantity stated, if it were a twentieth of an inch thick.

There is no question that the Heliopolis obelisks had copper caps, as reported in the Middle Ages ; but it is almost certain that such caps were plated with precious metal, as the surface is called white, which no copper could be after thousands of years of exposure. Any alloys, to keep a polish after such a time, must have been largely of gold.

The amount of copper used in Egypt is scarcely realised by various writers. The slag-heaps of Wady Nasb in Sinai amount to about 100,000 tons. If the smelters only got 5 per cent. of metal, that means 5,000 tons of copper ; this, spread

over five centuries of activity in the Old and Middle Kingdoms, implies a steady supply averaging 10 tons a year. Can we, then, imagine the magnificent Hatshepsut glorying in dedicating 3 tons of copper? and all of it in wrought rings. Castings must not be judged by the small museum objects that escaped plundering; Tehutmes III cast large doors all in one piece for the temple of Amen. In considering ancient supplies of metal, we must always remember that the early civilisations stripped out all visible supplies, and the stream beds of many old countries may well have been as rich as those in Australia, California and Alaska have proved to be in our own times.

F. P.

Hieroglyphic Texts from Egyptian Stelae, &c., in the British Museum. Part VII. 50 plates. By H. R. HALL. 1925. (N.P.)

The British Museum has an honourable record for publication, such as none but Leyden can show. In the present volume are mostly family steles of the XVIIIth dynasty, and it will be a help to study to have these completely reproduced in this form. Where such diligence is shown it might be happier to have the figures drawn by some one accustomed to Egyptian expression. The inscriptions are transcribed, rather than in facsimile of the exact forms, and doubtless the awkward position in a fixed lighting is the cause of writing *ab* for *ka* in Plate 46, last line but one, and the north plant for the south in Plate V. 296. Without drawing over dry squeezes it is difficult to be more exact.

Die Ornithologie der Sinai-Halbinsel. Dr. O. LE ROI. (*Journal für Ornithologie*, LXXI.) Pp. 28-95, 196-252. 1923.

This study contains a long bibliography of works that the late Dr. le Roi consulted, and a catalogue of 224 species which were sufficiently authenticated, beside many others reported. The various travels in Sinai by the author gave him a first-hand acquaintance with the subject. This is, therefore, a valuable work of reference, and shows what species may be expected in the eastern desert of Egypt. The *Ibis comata* does not appear in the list.

Die Gartenpflanzen in alten Aegypten. Dr. LUDWIG KEIMER. 1st Band. 8vo. 187 pp. (Hoffmann und Campe, Hamburg.) 1924. 110 frs.

This is a valuable and very full study of 44 ancient Egyptian plants, to be extended in future parts. Nearly half of it is a description of each plant, its nature, ancient examples, figures on monuments, names, and modern position. Then follow 44 pages of notes and references, and then 64 pages autographed with discussion of hieroglyphic names, and sketches of the ancient figures of the plants. It is therefore a standard work, which will be indispensable in any discussion of Egyptian plants, and the numerous figures of the ancient representations will be a useful aid in identifications. We hope that the rest of the flora will be similarly treated.

Der Heutige Stand der Mannafrage. A. KAISER. (*Mitt. der Thurgau Naturforsch. Gesell.*, 1924.) 8vo. 59 pp. and table.

This paper discusses the nature of plant manna, the various sources of it, and the literature on the subject. As this Swiss scholar has personally studied the question in Sinai, his conclusions may well be accepted as verified.

NOTES AND NEWS.

IN connection with the Nubian source of the plans of the rock tombs of the Uahka family at Qau, another case of an imported plan may be noted. The great tombs of the XIth dynasty Antef kings at Qurneh have been identified by Mr. Winlock as the large square yards sunk in the rock with chambers opened out on all sides, for the burials of the court. Such a type of tomb was quite unknown in Egypt before that date, and is so peculiar that it was probably introduced from elsewhere. In the extreme south of Tunisia the custom is to excavate a large open square court in the rock, and cut subterranean chambers branching out of it in all sides (see D. BRUUN, *The Cave Dwellers of Southern Tunisia*, p. 103). Such a primitive habit seems to have been the source of the peculiar open square courts of the Antef family, and we can hardly avoid the inference that they brought this custom with them from Tunisia as Eastern Libyans.

A paper by M. P. Rivet before the Académie des Inscriptions (*Comptes Rendus*, 1924, p. 335) is so important ethnologically that attention should be called to it. He shows that the Melanesian vocabulary is closely the same as that of North America on the Pacific coast, and the Australian vocabulary as that on the South American Pacific coast. Moreover, there are already noted by anthropologists resemblances of the products and habits which accord with these connections. The conclusions are fundamental for the ethnology of America.

The arrangements of the work of the British School for the coming winter are that Miss Caton-Thompson and Miss Gardner will excavate sites on a larger scale in the Fayum Desert, and study the lowest and earliest levels of deposits; Mr. Carline will join them for part of the season. Mr. K. S. Sandford hopes to thoroughly explore the eastern desert for the source of the earliest human remains, which have been found in the high Nile gravels at Qau. These researches promise most important light on the rise of civilisation and the earliest period of man. The official violation of the Egyptian law on antiquities continues to hinder the undertaking of large work on the historic ages.



BANTANTA, FROM COLOSSUS AT MEMPHIS.
(See p. 102.)

ANCIENT EGYPT.

GRANT OF SOVEREIGNTY OVER CARCHEMISH TO HIS SON BIYASSILIS BY THE HITTITE KING SUBBI-LULIUMA.

IN *Keilschrifttexte aus Boghazköi*, I, No. 28, there are published the fragments of a letter from the Hittite king Subbi-luliuma (1400 B.C.) to Biyassilis, who, as we learn from another inscription, was son of Subbi-luliuma and king of Carchemish. It is an interesting document, but no translation of it has yet been published, probably on account of its fragmentary character and the fact that the scribe who wished to show off his knowledge of Assyrian has made it a mixture of bad Hittite and worse Assyrian.

The introduction, which is much broken, reads: "... the Sun-god . . . the king [of the Hittites, the favourite ?] of the god Tessub . . . [S]ubbi-lul[iuma] . . ." the king of the Hittites.

"To Biyassilis, my good brother; in regard to sovereign[ty] I put no limit (literally, extinction, *kfstin*) to it among his descendants hereafter when they grow up. Whatever son or grandson of Biyassilis grows up in the city of Carchemish, or of the seed of Biyassilis, he shall have rule (there). Whoever makes claim to the Sun-god (the Hittite king) that he is of the seed [and therefore should be ?] king of Carchemish . . ." Here there is a long break. Then we have:

"The pronouncement (?)¹ of our lord, the great king, which cannot be overthrown, which cannot be broken. Whoever transgresses it, he shall be condemned before Tessub, the mighty, my lord, the Sun-goddess of Arinna, my lady, and before all the gods.

"Tattiya, the scribe, has written this."

Biyassilis signifies "the man of Biyas," the classical Baiae, modern Piyas, as Khattusilis does "the man of Khattusis" or Boghaz Keui.

A. H. SAYCE.

¹ The characters are partly effaced, but seem to represent the Assyrian *a-wa-tum*.

EGYPT IN AFRICA.

[The following notes on certain customs and beliefs current in East Africa (Kenya Colony and Uganda) are taken partly from A. C. HOLLIS, *The Masai: their language and folklore*, Oxford, 1905 (H.M.) and A. C. HOLLIS, *The Nandi: their language and folklore*, Oxford, 1909 (H.N.); and partly from my own observations. This continues the subject started in ANCIENT EGYPT, 1914, pp. 115-127, 159-170.]

1. *The chief as priest.*—The *orkoiyot* of the Nandi is the supreme chief of the whole tribe. "He is a diviner, and foretells the future by such methods as casting stones, inspecting entrails, interpreting dreams, and prophesying under the influence of intoxicants . . . [the *ol-oibōni*, or chief medicine man of the Masai, divines in similar ways, H.M. 324.] . . . The Nandi believe implicitly in the powers of their *orkoiyot*. They look to him for instruction when to commence planting their crops; he obtains rain for them, either direct or through the rain-makers (*uindet*, pl. *uik*), in times of drought; he makes women and cattle fruitful; and no war-party can expect to meet with success unless he has approved of the expedition." (H.N. 49.) "The person of the *orkoiyot* is usually regarded as absolutely sacred. Nobody may approach him with weapons in his hand or speak in his presence unless first addressed; and it is most important that nobody should touch his head, otherwise it is feared his powers of divination, &c., will depart from him." (*ib.* 50.)

2. *Mundane spirit world.*—"Years ago a man is said [by the Nandi] to have gone to the land in which the spirits [*oiik*] live. He fell into a river one day and lost consciousness (or died). When he came to himself again he was in a strange country, where there were hills, rivers, plantations, and oxen, just as on earth. The spirits came to him and said, 'Young man, your time has not yet come when you should join us. Go back to the earth' [*Tom-ko-pek kenyisiiek-kuk parak, ichorteke yu. Weiike koret ap piik*]. With that they struck the ground and the man lost consciousness again, to wake up near the place where he had fallen into the river." (H.N. 41.) Cf. ANCIENT EGYPT, 1914, pp. 26, 28, 162. In this connection it may be of interest to recall the story given by Giraldus Cambrensis (*Itinerarium Kambriae*, Bk. I, Ch. viii) of the adventures of a boy named Elidorus in the country of the "little people," which is described as being "most beautiful . . . adorned with rivers and meadows, woods and plains, but obscure, and not illuminated with the full light of the sun." Of the language of the inhabitants, the words are said to be "very conformable to the Greek idiom."

3. *Every object has its spirit.*—The Awa Syan or Bantu Sabei (who live in Uganda on the north side of Mount Elgon) say every part of the body has its "god" (*ovurueir*); e.g., a man who has hurt his leg with a hoe will say, "The god of my leg has blundered" (*ovurueir vua ekigeri changi vuēwēre*).

4. *Sacred fig-trees.*—Among the Nandi the *teldet* tree (*ficus* sp., not *sycomorus*) may not be used for building or as firewood, and it is used for the old men's councils (*kāpkimoget*). (H.N. 86.) A parasitic fig, called *simotuet* (near *f. elegans*) is regarded "almost as sacred." Wood from it may be used for sacred fires.

(H.N. 87.) This latter tree is called *o-reteti* by the Masai, and is used by them as a means of removing a curse: "if one man curses another, and the curse takes effect, the man who has been cursed calls the other and asks him to spit on him and to tie on his arm a strip of cord made from this fig-tree. The cord is first of all dipped in hot milk, and then four beads are threaded on it." (H.M. 338.)

5. *Contracted burial*.—Among the Masai the body of an ordinary person is put out for the hyaenas. It "is always taken to the west side of the kraal, towards the setting sun. It is laid on the left side with the head towards the north, so that the face looks towards the east. The legs are drawn up to the chest, the left hand supports the head, and the right arm is folded across the breast." (H.M. 304.)

6. *Recess graves*.—The Masai, when burying a medicine man, or rich person, dig a "small hole resembling a trench (*en-giti-kumoto n̄yo em-boūt*), into which the body is laid and covered with stones . . . Whenever anybody passes this spot, he throws a stone on to the heap, and this is done for all time." (H.M. 305.)

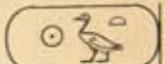
7. *Offerings to the dead*.—The Awa Syan offer once a year to the spirits of the dead (*omusambwa*, pl. *emisambwa*) a small amount of "*ekiru*" (*Eleusine coracana*, eleusine grain or "*wimbi*"). If this offering is neglected, the ghost is liable to haunt the undutiful relation; it enters his hut at night and seizes the person's neck, who wakes up and feels pressure there. In the morning he is ill, and goes to a medicine man (*omufumo*, pl. *awafumo*), who directs him to make an offering of beer (*amarua*) and a fowl or goat; the latter must be killed and put in a tree (so that it cannot be taken by a hyaena), at some distance from the man's hut, and a small hole must be dug close to the outside of the hut door, in which to put the beer-pot. If the ghost accepts the offerings, the man will recover; if they are not accepted, he will not recover.

8. "*The hyaena*."—In ANCIENT EGYPT, 1914, p. 118, reference is made to the chief undertaker among the Atonga being called "the hyaena," "because he is not afraid to approach the dead," and a comparison is made with the Egyptian *kher heb*, the chief reciter, who "opened the mouth" that the corpse might be able to revive, and "consigned the dead to the care of the Jackal-god Anubis, analogous to the helper of the dead being termed 'the hyaena.'" The majority of tribes in East Africa do not bury their dead, but lay them out for the hyaenas. The Masai (H.M. 305) and the Nandi (H.N. 70) put meat near the body to attract the hyaena. Regarding the quotation above about the Tonga "hyaena," it is not made clear what tribe is meant. But I think the origin of the man being called "hyaena" is more likely from the hyaena being the "living mausoleum of the dead" than from being analogous to the *kher heb* consigning the dead to the care of Anubis. The hyaena is held in great respect by most East African tribes; the Nandi "say that hyenas are hermaphrodites, and that they are the longest sighted and possess the keenest scent of all animals . . . They are also believed to talk like human beings, and to hold communication with the spirits of the dead." (H.N. 7.) The Nandi have several proverbial sayings concerning the hyaena, of which one is, "Do not show a hyaena how well you can bite, for his jaws are stronger than yours" (*ma-ki-'por-chin kimaketyet susut*).

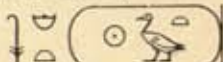
G. W. B. HUNTINGFORD.

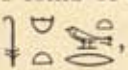

ROYAL INHERITANCE IN THE XIXTH DYNASTY.

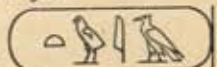
A STUDY of the XIXth dynasty brings to light some interesting facts of inheritance. In working out these facts I have taken as a basis the relationship-titles of the queens, those relationships always referring to that king with whose name the queen is then associated.

The great queen at the beginning of the dynasty is Sit Ra, 






whose filiation is not yet known, but by her very name she clearly claims the position of heiress. In the tomb of Sety I (*M.A.F.*, II, Pt. III, Pl. xl) she is said to have been born of the Divine Mother, proving that she was of royal birth. She appears to have married both Rameses I and Sety I, for in the temple of Abydos her statue is represented with those of the two kings in the scene of the adoration of the king's barque (*Mar., Abydos*, I, Pl. 32). Her statue stands behind





















that of Rameses I with the title and name . The position


of the statue indicates that she was the queen of Rameses I, and the epithet shows that she was alive at the time, years after the death of Rameses I. In the tomb of Sety I, where the only king mentioned is Sety himself, her sole title is , and her name is again followed by the epithet, . The only possible conclusion to be drawn from this is that she was the queen of Sety I and that she survived him, though for how long there is nothing to show. In her own tomb she is "the King's Wife, the God's Wife, the Great Mother of the King, Lady of the Two Lands, Mistress of the South and North." There is nothing to show which king or kings are indicated in these titles; but, seeing that the Egyptian kings were worshipped as gods after death, it is possible that "God's Wife" may mean "Wife of the dead king," while "King's Wife" would mean "Wife of the living king." As she was still alive when Sety's tomb was finished, and therefore presumably survived him, the living king would be Rameses II, and her title Great Mother (or, as we should say, grandmother) would also apply to him. We thus find the marriages of a queen with three generations of kings, as in the case of Aah-hotep in the XVIIIth dynasty.

The name of Rameses II's mother was Tuya, . In his temple

at Abydos he is said to be "born of the King's Mother, Tuya" (*Mar., Abydos*, II, 16). From Tanis there is a black granite Middle-Kingdom statue, reworked under Rameses II in honour of his mother, who is there called "the King's Mother, she who bore the mighty bull, Ussr-maât-Ra, the Hereditary Princess, great of favour, great of praises, Wife of the God, Mother of the King, Great Wife of the King whom he loves" (*Petrie, Tanis*, I, Pls. II, 11, 12; XIV, 1; pp. 6, 7). Here again the phrase "Wife of the God" may well refer to the dead king, while the title "Great Wife of the King" must by its position refer to the living monarch. The expression *mrt-f* is generally used in the present tense, "whom he loves"; again showing that it is the living king who is intended. At the Ramesseum is

a broken statue on which are Tuya's cartouches three times repeated, one with the title , another with the title "Great [Wife of the King] whom he loves" (the signs   are missing); the third is followed by the epithet  , "The living wife" (*Ann. du Serv.*, II, 194). This epithet not only shows that she was alive when the inscription was sculptured, but is strong presumptive evidence of a marriage between herself and her son Rameses II, and corroborates the inscription on the Tanis statue. Still further corroboration is found in the filiation

of                    , who is represented on the statue of Tuya now in the Vatican (Marucchi, *Museo Egizio Vaticano*, p. 43), and is also represented, on a red granite colossus of Rameses II from Abukir, as a small standing figure with the titles, "Daughter of the King, of his body, whom he loves, Great Wife of the King, Hent-mi-Ra." The evidence is then practically conclusive of a marriage between Tuya and her son Rameses II. Mother-and-son or father-and-daughter marriages do not occur without a very definite and strong reason for the union, and such a reason can only be found in the fact of inheritance in the female line combined with succession to the throne by right of marriage.

Hent-mi-Ra was, as is seen by the Abukir inscription, both daughter and wife of Rameses II, and as she was the daughter of Rameses' mother she was his half-sister as well. She appears to have died young and without issue, as her name is not found on any other monuments, though on the Vatican statue she has the epithet .

We now come to what is possibly the method of inheritance in the XIXth dynasty. In the case of Rameses' numerous sons it was the fourth and thirteenth sons who became in succession heirs apparent. At first sight this might point to the early death of the intermediate sons, but this can hardly be the fact when we consider that Bint-anath, Rames, Khāmwas and Merenptah, the four principal children of the king, are all children of Yst-nefert. It is obvious that another factor comes into play, and that the succession is regulated not only by marriage with the heiress, but by the birth of the heir, who had to be the son of the wife who was highest in rank, whether he were the eldest son of the king or not. Such a form of succession is seen in modern India, where in Oudh the son by a wife of high social standing inherits rather than the son whose mother is of lower social position. Though there is no definite law on the subject, both Hindus and Moslems consider that the mother's rank affects the inheritance of the son, no matter whether the mother is the senior or junior wife. (I am indebted for the information regarding India to Mr. Yusuf Ali.) The Indian evidence suggests that originally the mother's position was all-important for the inheritance of property by her children.

Such a mode of succession will account for many of the problems of inheritance in the XIXth dynasty. Rameses II's eldest son, Amen-her-khepesh-ef, was probably not the son of an heiress who transmitted the descent. The second son was Rames, son of Yst-nefert, and it was not until the death of Rames, which occurred after the 26th year of his father's reign, that Khāmwas became the heir apparent, a position which he held for more than twenty-five years. He then disappears from the scene, presumably having died, and all his official functions and position are transferred to Merenptah, the last surviving son of Yst-nefert and the

thirteenth son of Rameses II. Yst-nefert's only daughter, Bint-anath, was the principal daughter of the king, and at one time was probably the principal wife, as she is more often represented than even Nefertari-mery-Mut. We see, then, that the children of Yst-nefert held the chief place and that the succession passed peacefully to her son on his father's death. The Indian parallel may perhaps also account for the position of Rameses II himself. Wiedemann and Breasted have pointed out that the figure of a prince has been cut out of the scenes of Sety's Libyan campaign, and that of Rameses inserted over it. The name of the prince has been practically obliterated, but his title, "First son of the King," still remains. (See the portrait of Bint-anath in frontispiece.)

If the law of inheritance in the XIXth dynasty were the same as the customary law in India, the first or eldest son of the king would be the heir until the birth of a son to the heiress. This is perhaps the reason why Rameses II insists that he was king "from the egg," i.e., that, as his mother's son, his was the prior right to the throne, and that his elder brother, born of a wife inferior in rank, had to resign his high position. Taking all the evidence into consideration, we may assume that Yst-nefert was the principal wife and that her sons were therefore heirs to the throne in order of age.


Nefertari-mery-Mut is, however, better known than Yst-nefert, as her tomb is in the Valley of the Tombs of the Queens, and at Abu Simbel her statues are much in evidence. Her genealogy is at present unknown; her children were (sons) Sety and Anub-er-rekhu and (daughters) Meryt-Amon and Nefertari. Of these Nefertari probably died young, for in the Abu Simbel list the figure of a royal woman, which determines the name of each princess, carries a flower in the case of Nefertari, such a figure being often the determinative of a dead woman; all the other figures in the same list are without flowers.

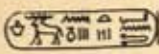
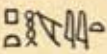
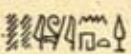
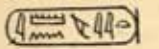
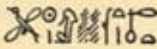
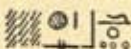
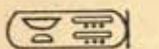

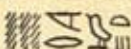
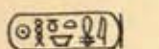

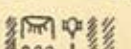


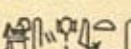
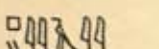
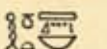

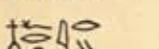
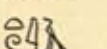
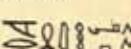
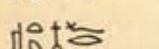
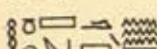
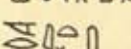
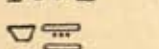
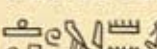
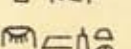
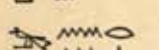
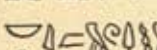
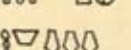
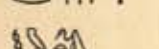


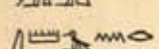

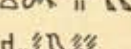
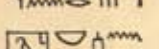
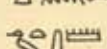
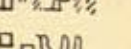
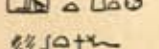
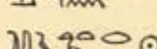
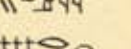
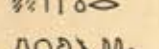
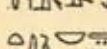
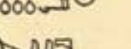
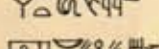
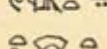
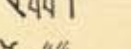
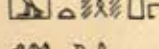
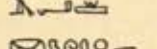
Meryt-Amon married Rameses II and appears to be second in rank to Bint-anath only, among the daughters. On the statue of Rameses II at Ehnasya (*Ann. du Serv.*, XVII, 36) the two daughter-queens are represented, one on each side of the front of the throne, each being called the name following in a cartouche. It is only in her tomb, however, that Meryt-Amon has the titles of "King's Great Wife, Lady of the Two Lands"; but as she also has the epithet after her cartouche it is possible that she survived Bint-anath.

Another daughter-queen is Nebt-taui, who died within her father-husband's reign, for in her tomb she is *maat kheru*. Her mother is at present not known, but she must have sprung from the heiress-line, as her titles are "King's Great Wife, Lady of the Two Lands, Mistress of the South and North," besides being "The Daughter of the King, of his body, whom he loves." Her position in the Abu Simbel and Derr lists, where she occurs fifth, shows that she was one of the elder daughters, and cannot therefore be the the thirteenth of the Louvre ostrakon (*Rec.*, XVI, 67). Tuya-nebt-taui was probably one of the younger daughters, as the ostrakon, which gives fifteen names, is of Rameses II's fifty-third year.

The Hittite princess, whose Egyptian name was , has the titles but is never , and though her name is enclosed in a cartouche it is always followed by the phrase "Daughter of the great Chief

of the Kheta." This suggests that as a queen she had a right to the cartouche and to the title "Great Wife of the King," but that as a foreigner she could not be "Lady of the Two Lands," and therefore could not transmit the descent.

Merenptah.—The succession of this king has been indicated above, and he probably legitimised his position still further by marriage. His queen was Yst-nefert, who at Silsileh is called "Great Wife of the King, mistress of South and North, Lady of the Two Lands, Yst-nefert," followed by the epithet . This means that she was alive at the time of the engraving of the inscription.


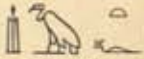
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	ABU SIMBEL 3 RD " DERR 4 TH LUXOR 6 TH "		" 5 TH "		" 22 ND "
	DERR 6 TH LUXOR 8 TH " ABU SIMBEL 6 TH "		" 6 TH "		" 23 RD "
	DERR 7 TH " ABU SIMBEL 7 TH "		" 7 TH "		" 24 TH "
	DERR 8 TH " ABU SIMBEL 8 TH "		" 8 TH "		" 25 TH "
	DERR 9 TH " ABU SIMBEL 9 TH "		" 9 TH "		" 26 TH "
	LUXOR 9 TH "		" 10 TH "		" 27 TH "
	LUXOR 10 TH " ABYDOS 14 TH "		" 11 TH "		" 28 TH "
	LUXOR 11 TH "		" 12 TH "		" 31 ST "
	LUXOR 12 TH " ABYDOS 13 TH "		" 13 TH "		" 32 ND "
	LUXOR 13 TH " ABYDOS 12 TH "		" 14 TH "		ABU SIMBEL 1 ST " MISWRITING OF BINT-ANATH?
	LUXOR 14 TH "		" 15 TH "		

She is usually supposed to be one of the elder daughters of Rameses II, and is sixth at both Derr and Abu Simbel and eighth at Luqsor. It is quite possible that this is the case, as the latest of Rameses' daughter-queens was Nebt-taui, who was next in age above Yst-nefert. If she were really the sixth (or eighth) daughter she would be at least as old as Merenptah, who is the thirteenth son. One daughter of Merenptah is known, born before her father's accession, as his name is not in a cartouche (*Rec.*, XVII, 152). It is possible that the failure of the direct female line may account for the family quarrels which seem to have ensued in the latter part of the dynasty. On the other hand, it appears extraordinary that Merenptah should have had only one wife, and should not have married one of the other heiresses, and so transmitted the descent.

The later Kings.—It is as difficult to understand the filiation and marriages of the late XIXth dynasty kings as of the Thothmessides. There is probably some factor determining inheritance which is not evident from the data at our disposal. The dispute may have been between the two forms of matrilineal inheritance; in one, the son succeeds by right of his mother, but is himself succeeded by his sister's son; in the other, the king comes to the throne by right of marriage with the heiress. In this connection I would suggest that the title



indicates the prince who claims the throne by mother-right.

The evidence appears to point to the succession of Amonmeses immediately after Merenptah. He was the son of Ta-khat, , whose name suggests that she was one of the transmitters of the descent. As such he would be a legitimate heir, but his wife Bakt-urenro has no filiation and was possibly not royal. He is represented in his tomb as , thereby apparently emphasising his claim through his mother. Among the younger daughters of Rameses II is a Ta-khat, who might well be the mother of Amonmeses. She was alive in the fifty-third year of her father's reign; even if she were only born in that year she would be thirteen at his death—a marriageable age. At the death of Merenptah, twenty years later, she would be not less than thirty-three, and her son Amonmeses not less than nineteen—quite old enough to reign. If this theory is right, Amonmeses claimed the throne through his mother and not through his wife, and therefore the succession would not continue in his family, but would pass to his sister's children.

Until, however, further details of filiation and marriage in this period are discovered, it is difficult to arrange the sequence of the later kings and impossible to follow the rules of inheritance with certainty.

M. A. MURRAY.

THE CULTIVATORS AND THEIR LAND.

<i>People.</i>		<i>Land.</i>	
Landowners, <i>rekhytu</i> ..	1120-28	Fields	1180-1204
Tenants, <i>merut</i>	1129-38	Landlords and bailiffs..	1205-28
Serfs, <i>thesu</i>	1141-48	Lakes	1232-40
Peasants, <i>sekhti</i>	1150-53	Canals	1241-52
Other classes	1154-69	Inundation	1253-61
Captives	1170-79	Gardens	1264-70

THE highest general term for people is *rehu* (1119), which might be applied to deities, as Horus and Set, or Isis and Nebhat; this is most nearly our term "persons," for we speak of the Persons of the Trinity.

The most important class of the general population were the *rekhytu*, originally figured by a crested plover or peewit, but modified into a mythical form later. At the conquest by the dynastic people the *rekhytu* were mercilessly hung by the victorious tribes, as also the bow-bearing Libyans (Q.H., xxvi c). Though the individuals suffered, the class remained, as in the Ist dynasty there was a controller of the *rekhytu* (1120), and a benefactor (*uas*, welfare) of the *rekhytu* (1121). Later there is a mayor of the *rekhyt*, and of the South ten of the *rekhyt* (1122-3); also an overseer of the fields of the *rekhyt* (1124). In the Middle Kingdom was a great peer "making to live the *rekhytu*" (1125), a *sar* lord leading the *rekhyt* (919), a boy is named "causing to command the *rekhytu*" (1126). The term still continued in the New Kingdom; the powerful Heremheb was "ruler of the *rekhytu*" (1127), and a *sar* still led the *rekhytu* (1128), while there are many references to this class in the XIXth dynasty (*Memphis* II, xxi). From all this we gather that they were a most honoured class, often directed by the veziers; to prosper them was an object of government; they were directly represented by the South council of ten, and probably by the other councils, and they were connected with agriculture. They therefore seem to have been the freeholders, or franklins, and their name suggests that they were the "known" people (*rekht*) and enrolled (*rekht*, a list). From this view it is evident how such landowners were cleared off by the victorious invaders (even William I ejected every Saxon landowner, except the huntsmen); yet there were *rekhytu* in the Ist dynasty, the new families who had taken possession.

The next class were the *merut*, the "bound" people attached to the estate, yet taxed. They were reckoned in families, as a man and woman are regularly the determinative, and they owned cattle (1299). They were under an overseer (1129), or a deputy of the palace (1130). The earliest reference is of the XIIth dynasty (1131). Some *merut* were messengers of the sculptors (1132). In later times there was an overseer of taxes (*shdyt*) of the *merut* (1133). A scribe of *merut* (1134) is named, and a vezier was intendant of the registry of *merut* (1135). There was a great lord of the *merut* (1136), and these serfs were fixed on the estates of Amen (1137-8).

Another class were the *khnemt*, who were under a controller (1139). This name implies that they were united to some one, yet distinct from the serfs above named. Free tenants would be a likely status, united to a superior, as the queen was *khnemt* to a king.

The *zāmu* were the "enrolled" youth, registered for *corvée* or military service (1140). The *thesu* were "tied," apparently, as serfs (1141-2). The only definite work named is that of herdsmen (1143); but they were ganged together so that a scribe was needed to record them (1144-5), which points to agriculture, and this is probably the sense of 1146, "giving order to the field gangs." There were messengers to the gangs of the towns (1147), pointing to a central control, and this is suggested also by 1148, intendant of scribe of clothing, intendant of the *thesu*, and royal scribe of documents, as if the clothing and registering the *thesu* was a public matter. The *thesu* were, then, large gangs of men bound to cultivation or herding, presumably serfs.

The *hatu* were field workers, mentioned in the Uahka period (1149), but of unknown status.

The *sekhti* were the inhabitants of the *sekhet*, the swampy land full of tall feathery heads of rush grass. They picked up a living by selling various products, as we see in the tale of the *sekhti*—basket- and mat-work, wood and salt. They were free men, and traded on their own account, but the land was inspected, and there is an intendant of *sekhet* land (1150), and a controller of all *sekhet* (1151). The inhabitants were registered, as we find a sealer of the *sekhti* (1152). These peasants travelled far with their asses, and the expeditions to Sinai had asses for the water supply and transport—500 beasts with 43 *sekhti* to drive them.

In public works there were gangs of porters to carry the bricks and mortar, known as *sethet* (1154), doing carrying; and, as in modern building, gangs of children were employed, "child-porters," *mesthat* (1155). The rope *th* interchanges with the duckling *th* in other words, as in *thet* or *thy*, a writing.

The *remtu* were agricultural and were registered, as in 1156 "in the ordering of agriculture of all the *remtu*, for to give the inventory all the *remtu*." They were perhaps partly captives, as there was an "officer of the mixed *remtu*" (1157).

Agriculturalists are separately named as *ohuti* (1158).

The *potu*, people in general, are linked up with what may be a source of the word, *repot pā t tept* (1159), chief orderer of the mass of people; the *paut*, a loaf, is used for a mass in general, as the whole mass of the gods, and *pot* seems to be equivalent to our term "the mass of the people," or "the masses."

1160 reads "Lord of the service of adoration, in the towns and nomes."

The plain term "man," *sā*, is used in some cases, as 1161, "man of Nekhen, as to the irrigated land."

The curious word *hemem* (1164-5) from the variety of spelling is probably foreign. It refers to mankind, and may be kin to *המון*, a multitude.

A usual word for a house servant is *ahems* (1166); others were said to be in the "following" of the diwan, *khēt* (1167), and housemaids were termed *khētet* (1168).

The poor were called *nemhy* (1169).

The position of captives is mentioned in all ages. Many of the captives of Den were buried by his tomb in the Ist dynasty, and described on their steles as "Of the Horus Semti, girl captive" (1170). In the IIIrd dynasty Amten was judge over the captives of Xoīs (?) (1171); and in the next dynasty there is another judge over captives (1172). Later is an intendant of the sacrificial bulls and of the prisoners, the products of a raid (1173), and an intendant of a diwan of the house of captives (1174). A child of the house of captives (1175) has the strange name (1176) of "Not known and not asked for," and similar names are

on two Vienna steles, "Not known of them," and "Not known and not established," that is, not on the civil register of births (1177-8). These were probably all orphans carried off in raids, but they rose to decent official positions in Egypt.

1119	ᲙᲗᲐᲚᲗ	ᲙᲗ	1156	ᲙᲗᲐᲚᲗ	ᲙᲗᲐᲚᲗ
1120	ᲙᲗᲐᲚᲗ	I R.F. XIX, 9; XXII, 128 N.N.		S.U. I, 11	
1121	ᲙᲗᲐᲚᲗ	I R.F. II, XV, 113 ᲙᲗ	1157	ᲙᲗᲐᲚᲗ	MX. C. 20558 ᲙᲗᲐᲚᲗ
1122	ᲙᲗᲐᲚᲗ	VI MA. I, 2 ᲙᲗᲐᲚᲗ	1158	ᲙᲗᲐᲚᲗ	GW. T. 144 ᲙᲗᲐᲚᲗ
1123	ᲙᲗᲐᲚᲗ	MM. D 57 ᲙᲗᲐᲚᲗ	1159	ᲙᲗᲐᲚᲗ	ᲙᲗᲐᲚᲗ
1124	ᲙᲗᲐᲚᲗ	V MM. D 19 ᲙᲗᲐᲚᲗ	1160	ᲙᲗᲐᲚᲗ	XXXA. S. XII, 281 ᲙᲗᲐᲚᲗ
1125	ᲙᲗᲐᲚᲗ	MX. C. 20539 ᲙᲗᲐᲚᲗ	1161	ᲙᲗᲐᲚᲗ	MX. C. 20642 ᲙᲗᲐᲚᲗ
= 923	ᲙᲗᲐᲚᲗ	C. 20538 ᲙᲗᲐᲚᲗ	1162	ᲙᲗᲐᲚᲗ	XII P. S. 117 ᲙᲗᲐᲚᲗ
1126	ᲙᲗᲐᲚᲗ	MX. C. 20636	1163	ᲙᲗᲐᲚᲗ	XII P. S. 74-354 VAR.
1127	ᲙᲗᲐᲚᲗ	XXVIII L. R. 314 ᲙᲗᲐᲚᲗ	1164	ᲙᲗᲐᲚᲗ	2A. S. V. 41 N. N.
1128	ᲙᲗᲐᲚᲗ	XXVIII L. R. 217 ᲙᲗᲐᲚᲗ	1165	ᲙᲗᲐᲚᲗ	ᲙᲗᲐᲚᲗ
1129	ᲙᲗᲐᲚᲗ	XXVIII P. S. CONE 104 ᲙᲗᲐᲚᲗ	1166	ᲙᲗᲐᲚᲗ	
1130	ᲙᲗᲐᲚᲗ	MM. D 43 ᲙᲗᲐᲚᲗ	1167	ᲙᲗᲐᲚᲗ	HEIR. IV, XV, ᲙᲗᲐᲚᲗ
1131	ᲙᲗᲐᲚᲗ	SIN. 35 ᲙᲗᲐᲚᲗ	1168	ᲙᲗᲐᲚᲗ	XII N. B. h. I, 16 ᲙᲗᲐᲚᲗ
1132	ᲙᲗᲐᲚᲗ	A. S. XIII, 236 ᲙᲗᲐᲚᲗ	1169	ᲙᲗᲐᲚᲗ	
1133	ᲙᲗᲐᲚᲗ	APIS. L. 965 ᲙᲗᲐᲚᲗ	1170	ᲙᲗᲐᲚᲗ	I R. T. II, XXVII, 120-5
1134	ᲙᲗᲐᲚᲗ	MM. D. 23 ᲙᲗᲐᲚᲗ	1171	ᲙᲗᲐᲚᲗ	III L. D. II, 3. 5 ᲙᲗᲐᲚᲗ
1135	ᲙᲗᲐᲚᲗ	V. L. D. II, 45-8 ᲙᲗᲐᲚᲗ	1172	ᲙᲗᲐᲚᲗ	IV MM. B. 13 ᲙᲗᲐᲚᲗ
1136	ᲙᲗᲐᲚᲗ	XXVIII L. R. 251 ᲙᲗᲐᲚᲗ	1173	ᲙᲗᲐᲚᲗ	MX. C. 20024 ᲙᲗᲐᲚᲗ
1137	ᲙᲗᲐᲚᲗ	XXVIII L. R. 105 ᲙᲗᲐᲚᲗ	1174	ᲙᲗᲐᲚᲗ	MX. C. 20154 ᲙᲗᲐᲚᲗ
1138	ᲙᲗᲐᲚᲗ	A. S. VI, 83 ᲙᲗᲐᲚᲗ	1175	ᲙᲗᲐᲚᲗ	MX. P. S. 269
1139	ᲙᲗᲐᲚᲗ	XXVIII L. R. 4 ᲙᲗᲐᲚᲗ	1176	ᲙᲗᲐᲚᲗ	
1140	ᲙᲗᲐᲚᲗ	BA. 293 N. N.	1177	ᲙᲗᲐᲚᲗ	V. 108
1141	ᲙᲗᲐᲚᲗ	IV-V L. D. II, 93e ᲙᲗᲐᲚᲗ	1178	ᲙᲗᲐᲚᲗ	V. 72
1142	ᲙᲗᲐᲚᲗ	MX. C. 20504 ᲙᲗᲐᲚᲗ	1179	ᲙᲗᲐᲚᲗ	MX. C. 20056 ᲙᲗᲐᲚᲗ
1143	ᲙᲗᲐᲚᲗ	A. S. M, 257 ᲙᲗᲐᲚᲗ	1180	ᲙᲗᲐᲚᲗ	I R. T. II, XXVIII, 142 N. N.
1144	ᲙᲗᲐᲚᲗ	VI A. S. XVI, 212 ᲙᲗᲐᲚᲗ	1181	ᲙᲗᲐᲚᲗ	VI L. D. II, 113b ᲙᲗᲐᲚᲗ
1145	ᲙᲗᲐᲚᲗ	IV L. D. II, 30 ᲙᲗᲐᲚᲗ	1182	ᲙᲗᲐᲚᲗ	R. C.
1146	ᲙᲗᲐᲚᲗ	XXVIII L. R. 252 ᲙᲗᲐᲚᲗ	1183	ᲙᲗᲐᲚᲗ	L. V. 60-3 ᲙᲗᲐᲚᲗ
1147	ᲙᲗᲐᲚᲗ	V. L. 413 ᲙᲗᲐᲚᲗ	1184	ᲙᲗᲐᲚᲗ	XII L. V. 6 ᲙᲗᲐᲚᲗ
1148	ᲙᲗᲐᲚᲗ	IV, L. D. II, 93 ᲙᲗᲐᲚᲗ	1185	ᲙᲗᲐᲚᲗ	XII N. B. h. I, 48 ᲙᲗᲐᲚᲗ
1149	ᲙᲗᲐᲚᲗ	IX-X. C. 20431 ᲙᲗᲐᲚᲗ	1186	ᲙᲗᲐᲚᲗ	XII N. B. h. I, xxx ᲙᲗᲐᲚᲗ
1150	ᲙᲗᲐᲚᲗ	MX. C. 20520 ᲙᲗᲐᲚᲗ	1187	ᲙᲗᲐᲚᲗ	XII T. C. XXVI ᲙᲗᲐᲚᲗ
1151	ᲙᲗᲐᲚᲗ	IV MM. C. 5 ᲙᲗᲐᲚᲗ	1188	ᲙᲗᲐᲚᲗ	P. S. CONE 57 ᲙᲗᲐᲚᲗ
1152	ᲙᲗᲐᲚᲗ	L. V. 102 ᲙᲗᲐᲚᲗ	1189	ᲙᲗᲐᲚᲗ	ᲙᲗᲐᲚᲗ
1153	ᲙᲗᲐᲚᲗ	SIN. 85, 137 N. N.	1190	ᲙᲗᲐᲚᲗ	VI L. D. II, 110c ᲙᲗᲐᲚᲗ
1154	ᲙᲗᲐᲚᲗ	III P. M. IX ᲙᲗᲐᲚᲗ	1191	ᲙᲗᲐᲚᲗ	MM. G. e ᲙᲗᲐᲚᲗ
1155	ᲙᲗᲐᲚᲗ	V S. M. I XVIII 404	1192	ᲙᲗᲐᲚᲗ	MX. C. 19 ᲙᲗᲐᲚᲗ
			1193	ᲙᲗᲐᲚᲗ	S.U. I, 12 N. N.

From the cultivators we pass to the varieties of the cultivated land. As early as Den in the 1st dynasty there is apparently a "controller of lakes and lands" (1180).


In the Old Kingdom there was an intendant of the king's land (1181), and an overseer of the *gohi* of his majesty (1182), the *goho* "land," evidently the higher land, now called *sharagy*, which needs irrigation in most years; there was

1194	𓂏𓂏𓂏	A·S·III, 255	𓂏𓂏𓂏	1232	𓂏𓂏𓂏	VI L·D·II, 116a	𓂏𓂏𓂏
1195	𓂏𓂏𓂏	XII N·Bh·I, 49	𓂏𓂏𓂏	1233	𓂏𓂏𓂏	III P·M·xviii	𓂏𓂏𓂏
1196	𓂏𓂏𓂏	XII N·Bh·I, 17	𓂏𓂏𓂏	1234	𓂏𓂏𓂏	VI D·G·II, 28	𓂏𓂏𓂏
1197	𓂏𓂏𓂏 misprint	A·S·xiii, 235	𓂏𓂏𓂏	1235	𓂏𓂏𓂏	V BN·II, 3	𓂏𓂏𓂏
1198	𓂏𓂏𓂏	IV-V L·D·II, 101a	𓂏𓂏𓂏	1236	𓂏𓂏𓂏	VI P·D·3	𓂏𓂏𓂏
1199	𓂏𓂏𓂏 (4=𓂏)	B·M·209	𓂏𓂏𓂏	1237	𓂏𓂏𓂏	M·K·C·20455	𓂏𓂏𓂏
1200	𓂏𓂏𓂏	MUN·A·22		1238	𓂏𓂏𓂏	V L·D·II, 72	𓂏𓂏𓂏
1201	𓂏𓂏𓂏	XII N·Bh·I, 17	𓂏𓂏𓂏	1239	𓂏𓂏𓂏	V S·U·I, 123	𓂏𓂏𓂏
1202	𓂏𓂏𓂏	A·S·X, 144	𓂏𓂏𓂏	1240	𓂏𓂏𓂏	XVII? A·S·XI, 170	𓂏𓂏𓂏
1203	𓂏𓂏𓂏	A·S·VIII, 256	N·N.	1241	𓂏𓂏𓂏	XII N·Bh·I, 17, 48	𓂏𓂏𓂏
1204	𓂏𓂏𓂏	A·S·XVII, 92	N·N.	1242	𓂏𓂏𓂏	XII L·V·3	𓂏𓂏𓂏
1205	𓂏𓂏𓂏	D·M·537, 550	𓂏𓂏𓂏	1243	𓂏𓂏𓂏	M·M·B·1	𓂏𓂏𓂏
1206	"	VI B·G·	𓂏𓂏𓂏	1244	𓂏𓂏𓂏	M·K·C·20678	𓂏𓂏𓂏
1207	𓂏𓂏𓂏	S·U·II, 184	𓂏𓂏𓂏	1245	𓂏𓂏𓂏 (=1184)	A·S·IV, 224	𓂏𓂏𓂏
1208	𓂏𓂏𓂏	S·U·II, 158	𓂏𓂏𓂏	1246	𓂏𓂏𓂏	B·M·CONE	
1209	𓂏𓂏𓂏	S·U·I, 11	N·N.	1247	𓂏𓂏𓂏 (15)	XI L·V·3	𓂏𓂏𓂏
SEE ALSO 1192, 1193.				1248	𓂏𓂏𓂏	VI MEIR·IV, VIII	𓂏𓂏𓂏
1210	𓂏𓂏𓂏	Q·K·A·S·XIX, 129	𓂏𓂏𓂏	1249	𓂏𓂏𓂏	A·S·IX, 141	𓂏𓂏𓂏
1211	𓂏𓂏𓂏	XII N·Bh·I, xxxv	𓂏𓂏𓂏	1250	𓂏𓂏𓂏	A·S·XIV, 30	𓂏𓂏𓂏
1212	𓂏𓂏𓂏	XII REC·X, 144	𓂏𓂏𓂏	1251	𓂏𓂏𓂏	V·71	𓂏𓂏𓂏
1213	𓂏𓂏𓂏	V M·M·D·19	𓂏𓂏𓂏	1252	𓂏𓂏𓂏	IX-X C·20431	𓂏𓂏𓂏
1214	𓂏𓂏𓂏	M·M·H·15	𓂏𓂏𓂏	1253	𓂏𓂏𓂏	ZER I R·T·II, XVI, 121	N·N.
1215	𓂏𓂏𓂏	V M·M·D·19	𓂏𓂏𓂏	1254	𓂏𓂏𓂏	ZET I R·T·XVIII	6 N·N.
1216	𓂏𓂏𓂏	V L·D·II, 45-8	𓂏𓂏𓂏	1255	𓂏𓂏𓂏	MERNEIT I R·T·I XXI	21 N·N.
1217	𓂏𓂏𓂏	M·M·D·37	𓂏𓂏𓂏	1256	𓂏𓂏𓂏	DEN I R·T·I XXIV	45 N·N.
1218	𓂏𓂏𓂏	V M·M·D·19	𓂏𓂏𓂏	1257	𓂏𓂏𓂏	AZAB I R·T·I XXVII	67 N·N.
1219	𓂏𓂏𓂏	II R·T·II, XXIII, 197	N·N.	1258	𓂏𓂏𓂏	QA I R·T·I XXIX	81 N·N.
1220	𓂏𓂏𓂏	VAR. "		1259	𓂏𓂏𓂏	VI S·U·I, 87	𓂏𓂏𓂏
1221	𓂏𓂏𓂏	III L·D·II, 3	𓂏𓂏𓂏	1260	𓂏𓂏𓂏	XI L·D·II, 49	𓂏𓂏𓂏
1222	𓂏𓂏𓂏	M·M·E·10	𓂏𓂏𓂏	1261	𓂏𓂏𓂏	XVIII L·R·325	𓂏𓂏𓂏
1223	𓂏𓂏𓂏	IV M·M·B·14	𓂏𓂏𓂏	1262	𓂏𓂏𓂏		
1224	𓂏𓂏𓂏	M·M·H·15	𓂏𓂏𓂏	1263	𓂏𓂏𓂏	XII N·Bh·I, 49	𓂏𓂏𓂏
1225	𓂏𓂏𓂏	E·E·248	𓂏𓂏𓂏	1264	𓂏𓂏𓂏	D·M·533, 546	𓂏𓂏𓂏
1226	𓂏𓂏𓂏	XII REC·X, 144	𓂏𓂏𓂏	1265	𓂏𓂏𓂏	V L·D·II, 71 C	𓂏𓂏𓂏
1227	𓂏𓂏𓂏	M·M·H·15	𓂏𓂏𓂏	1266	𓂏𓂏𓂏		
1228	𓂏𓂏𓂏	M·K·C·20101	𓂏𓂏𓂏	1267	𓂏𓂏𓂏	D·M·562	𓂏𓂏𓂏
1229	𓂏𓂏𓂏	M·K·C·20240	𓂏𓂏𓂏	1268	𓂏𓂏𓂏	V L·D·II, 71 b	𓂏𓂏𓂏
1230	𓂏𓂏𓂏	XVIII G·W·T·182	𓂏𓂏𓂏	1269	𓂏𓂏𓂏	V M·M·D·5	𓂏𓂏𓂏
1231	𓂏𓂏𓂏	XVIII G·W·T·130	𓂏𓂏𓂏	1270	𓂏𓂏𓂏	V S·U·I, 123	𓂏𓂏𓂏

also an overseer of this *qā* land (1183), and of the *oho* high land (1184). The greater part of the cultivation was on *u* land (1184), which seems to have been open field cultivated in common, as it is contrasted with *āht* or *hāt* land (1185)—

called from *āht*, a cord, or field measure, or cultivated field, from which peasants were named *āhuti*. This latter was therefore measured land of private holdings, as seen in 1187, where it belongs to the queen. The word varied in spelling, the Old Kingdom instances being *hāt*, and the later ones *āht*. The determinative of *hāt* in 1193 is dealt with below.

Minor titles about land are the "scribe for the fat land" (1194); this name for land, *ozy* or *ody*, points plainly to fat, *oza* or *oda*; the intendant of the domain (*zez*) appears in two forms (1195-6); a controller of the *māt* (1197) is different, as it is probably a misprint for the bow-case, referring to a keeper of the bows (as P.M. ix); 1198 is an intendant of the marshes and lakes; 1199 is a scribe of the *am* land, which suggests *amem*, clay, and good clay pits for pottery would be valuable for registration; 1200 is quite indefinite; 1201-2 refer to the *set*, seat of a person or office; 1202 a hearer of complaints in the land office; 1203 is a manager of the *set māt* for the dead; 1204 is a scribe of boundaries.

The most usual sign connected with land is the *adeb* , the origin of which is unexplained. There are four instances where the name occurs (1205-8), always with the title *khent*; so far as the name indicates there is *ād* pasture, and *bu* elevated, implying a field or pasture-land almost above the inundation. The workers on these *adebu* were the *hātu*, men and women (1193, 1209). They paid taxes, as in 1209, "his things squeezed from the *hātu*," i.e., taxes or share of produce belonging to the land-owner. These lands belonged sometimes to the palace, "orderer of the people for the lands of the *usekht*" (1210-2); or else to the endowment of the "house of life" (1213), or to the *rekhytu* (1214), or also to the *merut* (1215), in short to every land-owning class. The term therefore refers to the nature of the land, and not to the tenure. The lands were registered by the "intendant of the registry of the *u* land office over the *adeb*."

There were laws passed concerning the *her adeb* (1217), orders (1218-9), and an official over the directions to the *her adeb* (1220). Thus there was strict external regulation of the *adeb* officials. There appears an expert of the office of *her adeb* (1221-2); a scribe who was an expert (1223); an elder of the office, and an intendant (1224-5), also many examples of a *her adeb* as an official (1226). This position was of much importance in the scheme of government; not only were the various officials 1212 to 1218 of the rank of vezier, but the plain *her adeb* (1226) was a vezier. What, then, was the function of the *her adeb*? He was carefully regulated by law, he attended to land belonging not only to the king but to the *rekhytu* (1215), yet a vezier could hold the title. He was not either the owner nor the cultivator. The only possible position seems to be that of bailiff for an absentee landlord. These bailiffs would need to be regulated and legally responsible to the land-owners, and yet a vezier might well be head bailiff of the royal estates. He was precisely what is described, "over the *adeb* land." There were attendants or pupils to the bailiffs "in the following of the office of *her adeb*" (1227). There was another office (1228) with an "intendant of the great office of land declarations," or registration of ownership.

The identification of the *adeb* as a sign of cultivated land raises the question of the meaning of it in the scenes of the royal ceremonies. The scenes on the great gateway at Memphis (*Palace of Apries*, v) were certainly some of them out-of-door actions, as at the group of palm-trees with the lake between them. The field signs of *adebu* behind the king imply that he is running through the fields. The resulting explanation of the scenes has been stated in the last number of this Journal, p. 65.

The scribes of the embankments are sometimes named (1229). The next (1230) is doubtful, and it looks like the scribe of the inundation (*temy*) embankment, yet the whole group is claimed as the name of a mat or sack. The intendant of the harbour of Thebes is named in 1231.

The standing water of lakes is distinguished by the tank sign *sh*, while canals and running water have the *mer* sign, with lines projecting at the ends to show that it is continuous. There were intendants of the lakes (1232), of the Fayum lake of the crocodile (1233), or of the South (1234); there was a general intendant of the lakes of the North (1235), and of the lakes to the limits of the nome (1236). The *thäu* of the lake is an unidentified office (1237). The intendant of the palace lakes (1238) managed the pleasure ponds of the gardens. The pools about the country were a nuisance anciently, as now, and there was an office of "burying" or filling up the pools (1239). The management by dams or locks must have been early, as necessary for any control, but it is only named once, by an "intendant of the key of the lake" (1240).

For the canals there were superintendents (1241), scribes (1242), and a controller of the royal canals (1243). The canal of Heliopolis (1244) was doubtless that which led off eight miles higher up at Old Cairo, and so was sufficiently high for irrigation. There seems to have been a recognition of the need of high supply and low drainage, to keep land in fit condition, now marked by blue and green lines on the maps. A high canal is named (1245), and *het* canals (1247), which seem as if derived from *heti*, lance, as supplying water lancing forth; probably the *hät* canal (1248) is a variant of this. For drainage there was an "intendant of mouths leading canals from the marshes" (1249-50), whose business would be to keep the drainage canals clear, so that they could discharge completely. The irrigation by basin is named by a "keeper of canal of the irrigation basin" (1251), *mekhetut*. The serf families of the canal lands were under an intendant (1252).

The inundation was specially attended to in the Ist dynasty; from six out of eight reigns, the seals of controllers of the inundation remain, with figures of a wading or swimming man (1253-8). In the VIth there was a controller of the storehouses of the inundation (1259), where the beams, ropes and picks would be kept ready to repair any breaches. The great vezier Amenemhat, afterwards king, was "Intendant of the gifts of heaven and the growth of the land brought by the Nile" (1260). There was an intendant of the *u* land inundated, probably to see that it was properly drained and dried for sowing (1261).

Two kinds of fields are defined, beside those named in 1183-1228. There are pastures for horses which were *neni-ähtu*, not cultivated, probably the grassy plains just above the inundation (1262), and the *sekhet* lands apart from the marsh lands (1263).

Gardens are often mentioned, and they were a considerable source of food to the Egyptian, both from fruit and herbs. The intendant of the garden (1264-8) was also a palace official (1265), with pupils or a "following" (1266). The position was a good one, as the eldest son of a high official was the palace gardener (1268). There was a woman controller of the "causing to go," or distribution, of trees; this was a post requiring taste and judgement without personal labour (1269). Another official had the duty of "increasing sycamores" (1270). The careful training of trees for years, to produce the forms of growth required for carpentry, shows what persistent care and foresight was given to gardens.

REVIEWS.

Thebes, la gloire d'un grand passé.—JEAN CAPART and MARCELLE WERBROUCK. 4to. 362 pp. 257 figs. £3. 1925. (Vromant, Bruxelles.)

The purpose of this work is to popularise the interest in Thebes, as the capital of Egypt. It is divided into twenty chapters on the different aspects of the city and tombs, and the photographs are well chosen, and are on a sufficient scale for clearness. Even for those to whom they are already familiar in a library, it will be convenient to have the subjects collected together. For the public nothing could be better to gain attention and create a wish to know more. The text and plates are kept well together for the ease of reading, not, as in some works, compiled without any connection of place or sense. Dr. Capart has explained all the subjects in a clear and flowing manner for the general reader, and we may hope that many will be thus attracted to his work in the future.

Animals of Ancient Egypt.—By DAVID PATON. 16 × 12 in. 37 pp. 31s. 6d. 1925. (Princeton University Press, and Milford.)

A study of all the species of animals known on the monuments has long been needed, and in this book an immense deal of work has been done on the mammalia, with full references to authorities. Unhappily the trail of the grammarian is over it all, for it is entirely arranged by the confused order of the hieroglyphs in the German list; the modern figures of the animals are only sometimes given as a secondary matter. We may be very thankful to have this much, but a zoologist behind it all would have been helpful. A sixth of the volume is occupied with an account of all the conjectures about the animal of Set, which is a useful summary of the confusion. A list of contents, or an index, is much needed.

The earliest examples of animals would be desirable, such as those on prehistoric vases, on the Oxford slate and the hunting slate. Along with the dehorned cattle should be mentioned the deformity of twisting one horn downward. The curled ram's horn, from which ammonites are named, should be noted, as it is often on the head of Amen and Khnumu, also Osiris (CAULFEILD, *Temple of Kings*, iv, xvi). The distinction between the pointed nose of *Papio hamadryas* and the bluff-nosed *Papio anubis* is needful. The round-nosed and square-nosed lions of the early ivories should be separated. The long-necked gazelle is put under one number with the giraffe. Of the ant eater there is only a note under the supposed Set animals; but there is a glazed figure from Luqsor, and, at University College, figures on a wooden comb, an ivory bracelet, and two ivory plaques. Among the cats the serval and cheetah should be distinguished (see *Researches in Sinai* for figures). The monsters should include the serpo-leopards from the slate palettes. Some notice should be taken of the bear, weazel, jerboa (L.D. II, iii, 3), hedgehog, buffalo, and four kinds of sacred bulls. The deer should be noted in *Koptos*, iii, Meir II, viii, and elsewhere. The zoological difficulties will be greater in the section on birds, and some ornithologist, who knows the African and Arabian species, should have a free hand in it.

Die Kunst des alten Orient. HEINRICH SCHÄFER und WALTER ANDRAE. Sq. 8vo. 164 pp. text, 114 pp. references. 388 pp. illustrations. 35 plates, colour and colotype. (Propyläen Verlag.) 1925.

This fine volume of illustration is divided into 274 pp. and 24 plates on Egypt, and 114 pp. with 11 plates on Mesopotamia: as many pages each contain several objects, this constitutes a large body of material for reference. The blocks are all photographs, and are excellently reproduced. The general size of the subjects, about 8 ins. by 5 ins., allows of sufficient detail without being unwieldy. The prehistoric objects are intermixed with the 1st dynasty, and in the text there does not seem to be any realisation of the position that there was as long a civilisation before the 1st dynasty as there was after it down to our times. The text contains 34 blocks, mostly plans of buildings; it follows the familiar ground without any new views as to the difficult periods. The chronology follows the Egyptian system in the first six dynasties, shortens the VII-XIth dynasties by two centuries, and then cuts out a whole Sothis period in the XIIIth-XVIIth dynasties. It is surprising to see that Amenhetep "Amûn ist zufrieden" is parallel to Akhenaten "der Atôn ist zufrieden," which gives a new reading for *akh*. This volume raises the difficult affair of selection for such anthologies. Here are three-tenths of the plates much needed, as being unpublished, mostly of the Berlin Museum; but seven-tenths of them are familiar, mostly stock subjects which appear in many other places. How far is this system to go? Each Egyptologist starts an album with a majority of well-known subjects, and a smaller proportion of unpublished matter. The collections of Bissing, Capart, Borchardt, Weigall, and the coming series of Breasted, cover mostly the same ground as the work of Schäfer. They are all costly volumes, and students will have to pay about thirty pounds, and be encumbered with many copies of the same subject, in order to get what might well be had for a third of the sum. It is not as if each editor needed his subjects for the exposition of his ideas; the text is usually written up to fit the collection of pictures. Cannot a halt be called in this book-making? It defeats itself by the scale of it. If each author would issue a much smaller volume of new matter it would be really welcome; but the present method looks too much as if the publishers were exploiting the public and dragging the editors behind them. The full description, references and sources, given for each subject is excellent, and far better than is some of the other collections.

Les Scènes de la Vie privée dans les tombeaux égyptiens de l'ancien empire. By P. MONTET. 8vo. 429 pp. 24 plates. (Istra, Paris, 100 frs.; Milford, London. 35s.)

The mass of scenes and phrases which cover the early tomb chapels are unique in the history of the world. No such social handbook has been preserved elsewhere; yet this source has been strangely neglected. At last there here appears a fairly comprehensive work on the interpretation of the subject, classing together the variants so as better to see the meaning. It is well remarked that the scene and its dialogue need to be treated as a whole, each part helping the understanding of the other. In such short phrases there is naturally much left to be understood from the obvious conditions or action; and our distant view of the life and the idioms may leave us sometimes in doubt of the intention. The meaning of the signs is often discussed, with common sense, and not restricted to philology.

In detail, we may note that the bundle of papyrus rolls, *as*, (*p-uo*) rendered *équipes*, is simply a register, or any kind of person, place or object registered. The harpoon (p. 262) with value *gnu* is already in Erman-Grapow as "Annals," and this explains the "birds of the annals of the gods," or on the endowment estates, in the "Negative Confession." The wine press which is formed as a frame should be noted on p. 268, as it is found from the Ist to the XIXth dynasty. The *mes odt* is not a "cutter of stone," but a finder or inventor of stone, one who searches for fine stone, and only one such man was sent with fifty miners to Sinai. Nor is there any emerald used for beads till Roman times; the Egyptians used amazonite, a green felspar. *Bekhen* (p. 291) is not schist but diorite.

The most interesting collection of market scenes of barter is partly used, but deserves fuller treatment. All through the work there is much to repay attention, and a full index of all the words dealt with makes the whole easily accessible. Doubtless rival philologists will find something to differ about, but there is no doubt that the work will add to the author's reputation, and long be a valued collection for reference.

Les Couvents près de Sohâg. Vol. I. By UGO MONNERET DE VILLARD, 8vo. 64 pp., 113 figs. (Edition hors commerce, Milan.) 1925.

This volume is published under the auspices of the Committee of Conservation of Monuments of Arab Art, which takes Coptic work under its care, and has brilliantly cleaned and repaired these convents. After three pages of preface there follow 18 pages on the history of the White Convent, and scarcely anything known about the Red. Then come 7 pages on archaeology, and lastly 18 pages on the history and examples of the trefoil apse. The historic references are probably complete, but there is no reference to the history shown in the building. The fact of the successive stones of the cornices not according, though of one pattern, proves that they were brought from another building; that can hardly have been other than the church in the large Constantinian settlement close by. Then the problem is, how much of the carving is due to the earlier building? Are the capitals, the shafts, the arches of the niches, all older? As the convent is shown historically to be of the age of Theodosius II (A.D. 440), the carving may be a century earlier. The discrimination of this by dated examples elsewhere is now necessary. A similar case is seen at Lincoln, where the Norman "Jew's House" is of stones from an older building, not matching at the joints; it seems that they are from a ruin of a fourth-century building in the Roman Lindum, discovered and reused eight centuries later. In the list of Egyptian monuments reused, there should be included the great granite naos of Neferites, cut up for the pavement of the axis. The chapter on archaeology is an outline of the descriptions by various visitors and architects. The last chapter, on the trefoil apse, seems to have been most attractive to the author, as forty of the figures are plans of such outside of Egypt. The position seems to be that this plan is first found at Velletri before Hadrian, and next in Hadrian's Villa. Then between 440 and 543 it was largely used in Egypt and Palestine.

It may be hoped that the succeeding volumes will deal with the method of support of the galleries (of which the beam holes remain), the lighting by windows, the date of the stone and the brick columns, the detail and dating of the decoration, and the problem of the carvings from an earlier church. The excellent illustrations and material here makes us wish for more.

The Pottery and Glaze-ware of Tell Amarna. By N. FLITTNER. (*Annual of the Russian Institute of the History of Arts*, Vol. I, pp. 137-164.) St. Petersburg, 1922.

The Introduction makes mention of the current story of the invention of glass by the Phoenicians, only to reject it on the basis of Egyptian finds, and goes on to give a brief survey of the principal glass and glaze finds in Egypt, pointing out that both are always coloured: "the Egyptians not only did not know, but—it seems—even never strove to prepare transparent glass . . . Malachite, turquoise and lapis-lazuli obsessed the Egyptian mind so much that it could not imagine any beauty outside these materials" (p. 139), and this also explains why glass was worked while in a soft, pasty state and, when cooled, "was treated like a precious stone—cut, engraved and polished" (p. 139).

In dealing with the name of glass in Egyptian, the author points out that in the inscriptions of the New Kingdom mention is made of artificial malachite and lapis-lazuli side by side with the real stones, and these artificial products he takes to be glass imitations of these stones. The author then gives a brief history of the development of this industry in Egypt, drawing attention to the scene in ROSELLINI, *Mon. Civ.*, pl. L (XVIIIth dynasty), which he takes to be a representation of glass-working; the current interpretation of the scene as gold-working seems to the author to be impossible, because (a) a vessel full of heavy metal could not be lifted on two sticks, (b) metal could not be melted in open vessels, (c) gold was cast in Egypt in the form of rings, (d) an ingot of gold of the shown size could not be lifted by one man.

The author next points out the sudden flourishing of the glass industry in the XVIIIth dynasty, and describes in more detail the finds of glass belonging to this period, which brings him to his main theme, Tell Amarna. By the way, the title of the article is slightly misleading: there is a very detailed discussion of the products, but no mention whatever of the "works" themselves.

It is very curious that throughout his article the author deals exclusively with the results of excavations carried out in Tell Amarna by Sir Flinders Petrie. He seems to be ignorant of the fact that both the D.O.G. and the E.E.F. have since dug on the site with very satisfactory and important results. If in the case of the E.E.F. it is pardonable, remembering the present conditions in Russia, and that probably the latest scientific publications are unobtainable there, it is totally unexplainable, however, in the case of the D.O.G., as this society has published several reports before the war.

After a full discussion of the technical side of the industry, the author gives a list of small objects, of unknown provenance, now in the Hermitage Museum (Petersburg), which he assigns to the Tell Amarna period on account of their forms and colours. The objects are shown on the accompanying plates (XII-XIII). The unhappy title of the plates ought to be commented upon: "Egyptian Imitations (glass and glaze)" suggests to the reader modern fakes of Egyptian antiquities, rather than Egyptian imitations in cheap materials of semi-precious stones. Again, "faience" is an inappropriate term as, technically speaking, the Egyptians knew no faience. The word "glaze," which the author uses sometimes, is correct, and should have been used throughout.

There follows a detailed description of every object, with a very interesting discussion on their forms, summing up what is known in Egypt about such in all periods. Particularly interesting is the discussion on the rosette, which is traced throughout the eastern basin of the Mediterranean, and it is finally concluded

that this motive spread from Crete to Egypt and Mesopotamia. Remarkably enough the author takes the equation Keftiu = Crete for granted, as if there were no questions whatsoever on the subject. Interesting is also the discussion of the motives of the so-called Egyptian and Syrian palmettes.

In conclusion, one must say that it is a pity such publications are made in a language totally incomprehensible to the great majority of people interested in the subject. If the publications cannot be made in a West-European language, at least some such procedure should be adopted as that used for the *Scripta Universitatis atque Bibliothecae Hierosolymitanarum*—all Hebrew articles are given in either a full, or an abridged, translation in some West-European language, and vice versa.

S. YEIVIN.

[The scene which is here attributed to glass-working is from the tomb of Rekhmara, described as making bronze doors for the temple of Amen.—F. P.]

Eine aegyptische Quelle der Sprueche Salomos. By ADOLF ERMAN. (Berlin Sitzungsberichte, 1924, XV.)

In *The Teaching of Amen-em-apt* (Egyptian Hieratic Papyri in the British Museum, second series, 1923), Sir Ernest Budge noticed two passages which recalled Proverbs. In the article under review, Erman goes very much farther; he recognises *The Teaching of Amen-em-apt* as the direct source of a certain section of Proverbs, and suggests a possible explanation of its inclusion.

The papyrus is divided into thirty "instructions." Erman traces nine of these in parallel passages in Proverbs. These passages are similar in sense and are in parts identical in wording, but the sequence and full context of the original have not been preserved. Seven of these nine passages are to be found in Proverbs, xxii, 17-xxiii, 10. These verses form part of a section which, by general acceptance, constitutes a book within a book. Erman finds convincing proof of the source of this portion of Proverbs in the verse "Have I not written to thee *shelshum* in counsels and knowledge?" (xxii, 20).

The Hebrew word *shelshum* has always been a stumbling-block to translators, since the literal meaning, "third," or the slightly different *shelushim*, meaning "thirty," seems senseless here. (The Authorised Version renders it as "excellent things," and Young's *Literal Translation* "three times.") By taking a variant of the literal meaning as the correct one, Erman obtains a counterpart to the last chapter of the papyrus: "Thou hast (now) seen these thirty chapters, what a joy they are, what an instruction they are," etc. The opening lines of the Egyptian composition ("Bow down thy ears, hear (my) words, apply thy heart to understand them") are also preserved, in this case almost word for word, in Proverbs xxii, 17-18.

Erman dates *The Teaching of Amen-em-apt* not earlier than 1000 B.C. He suggests the following possibility for the inclusion of the Egyptian composition in Proverbs:—In Saite or Persian times, one of the Jews then living in Egypt translated this work into Hebrew or Aramaic for his co-religionists, making suitable alterations and suppressions. He preserved the division of the original into thirty chapters, and began and ended his book with the same passages. The book then fell a victim to sundry collectors of proverbs and sayings. The final stage of election and mutilation is visible in Proverbs, where several passages still bear evidence to their Egyptian origin, the final proof being given by the amazing retention of the word "thirty."

I. B. E.

Die Kinder Israel in Ägypten. By W. WRESZINSKI. (Deutsche Rundschau, vol. CXCIX, pp. 251-68.)

In this article, Wreszinski discusses the question of Israel in Egypt and the Exodus. In his opinion, the Hexateuch (the five books of Moses and the Book of Joshua) is a combination of the traditions of two distinct sets of tribes. The tribes who were in Egypt never crossed the Jordan, and the tribes who crossed the Jordan were never in Egypt, whilst the story of the wandering in the desert was invented to reconcile the two traditions. This fusion of traditions was made with the object of showing that brotherly unity and the monotheistic worship of Jahwe existed among the tribes from time immemorial, in accordance with the dogma of the priesthood of Jerusalem. In the same way, the true nature of the connection with Egypt was altered beyond recognition to suit the spirit of the times in which the final narrative was compiled.

The Egyptian traditions belonged to the tribes of Jacob, Joseph and Levi, who formed part of the Hyksos invasion and retreat (1780-1580 B.C.). Expelled by the Egyptians with the Hyksos, they fled to the steppes south of Palestine in the neighbourhood of Kadesh barnea. Here they were the vassals of Egypt for centuries—a point on which the Bible is silent. From this region individual tribes gradually entered the promised land (*c.f.* Numbers, xiii, in which a trace of correct tradition is preserved). A Hyksos king was called after Jacob, and the influence of Egypt is visible in the names Moses, Hur, Phinehas ("the negro") and Hophni ("tadpole"), all of which were common in Egypt in the second millennium. Later, these tribes formed the kingdom of Judah; their hero was Moses, a Levite.

The second tradition embodies the conquest of the country west of the Jordan by eastern Semites (Hebrews, Israelites and Ephraimites) who crossed the river from their settlements on the eastern bank in the period of the Tell el-Amarna letters (1400 B.C.). Their place of origin was Midian; they formed later the kingdom of Israel, and their hero was Joshua, an Ephraimite.

The tribe of Ephraim absorbed or destroyed the tribe of Joseph, whom they found already settled in the country. The disappearance of the tribe of Joseph was so complete, or took place so early, that these events are accounted for in the Biblical narrative by making Ephraim a son of Joseph.

L. B. ELLIS.

Palaeontologia Sinica. Painted Stone Age Pottery from the Province of Honan, China. By T. J. ARNE. 4to. 40 pp. 13 plates. Peking. 1925. (*Geological Survey of China.*)

This work opens up a very important view, unhappily so isolated that we can hardly see its connections. If we had some dozens of sites examined in Asia we might begin to trace the relations of various cultures. At present there is hardly any place of comparison except at Anau, three thousand miles westward, or on the way to Egypt, half as far again. It seems almost hopeless to compare things so far apart, and with an unknown difference of date. There is some resemblance in decoration, but the quality of pottery must be dependent on the local clays. The simple diagonal cross-lines is so obvious a motive that it is bound to be re-invented. Parallel wavy lines are found at Anau (pl. 31) and Tell Yehudiyeh; parallel straight lines at Anau and Honan; chequers at Anau (21) and Egypt; over-casting pattern copied from a basket edge at Anau and Honan; also the solid triangles linked by lines. On the other hand,

curves and a spiral are seen at Honan, but only one poor instance of concentric lines at Anau; the same of triangles with diagonal shading. In Egypt alone is seen the pairs of parallel lines with a wavy line, or blobs between the pairs of lines, a pattern coming from Syria. It does not seem, then, that we can claim any certain connection of these centres, so remote from each other, beyond a certain general Asiatic style, which is not African or American. We shall need many such works as the excellent study before us, if we are to grasp the history. The analogies which are claimed between Honan and Eastern Europe, in the curved triangles, and the general resemblances of common motives at Susa, Mussian and Abu Shahrein, are all noted and figured in this work; most of the decoration could be paralleled in Egypt as well. But over so many thousand miles we need many more links before we can give weight to a specific connection. There are, for instance, white lozenges left in a black ground on the earliest Susa pottery (4000 B.C.?) and on the great jar of Defenneh (pl. XXV) of 600 B.C. This can only be an Asiatic generality over thousands of years.

This publication is beautifully illustrated from Stockholm, with the true Scandinavian quality of work, and the text is in English. May it be a model for many further studies.

Coptica. Edited by W. E. CRUM and H. I. BELL, with an introduction by R. CAMPBELL-THOMPSON. Hauniae. 1922.

The Danish Government has instituted the Rask-Oersted Foundation for the purpose of helping forward the scientific investigation of the past. The present volume is the outcome of this generous policy, and the editors of the volume are men whose names are a guarantee that the work is thorough and scholarly. Though Coptic appeals as yet to a very small circle, the interest in that period of the world's history is spreading. Hitherto only the wider issues have been studied; the clash of churches, the wars of the Cross and the Crescent, fill many volumes; but the lives of the people who lived in those stirring times are unknown. This book throws light on the little incidents of daily life, the little details which continue though churches fight and kingdoms fall. Here is a letter: "Apa Enoch it is writes to my brother Cosma, saying, set four sucking-pigs apart, in a place by themselves, and give them a little barley, that their bodies may improve somewhat thereby. For it is desired to give them to the pagarch's bride." Then there are contracts for work: "Daniel it is, by God's mercy archimandrite, writes to Apa Paul, the carpenter, saying, I appoint thee to do the carpenter's work of the monastery, and that you do your work without neglect in anything. And [I undertake] that we will pay your wages." In this case the wages were paid in kind and consisted of food, wine, and clothing. There are also receipts, or perhaps they should be called invoices, of wine; the date is given first, and is followed by a place-name, then the amount of wine, and finally the name of the camel-driver who transported the wine. "Phaophi I. Takoutes: wine, 14 large measures in full. Kouléu: wine, 57 small measures. Takoutes: wine, 63 small measures. Macarius, camel-driver."

Though the letters and accounts deal with the small affairs of obscure people, the human interest is greater than in more ambitious texts, and they form a background of human life without which all history is dull and uninspiring.

The translations with the notes and introductions form a volume which no student of the period or the language should be without.

M. A. MURRAY.

A Royal Tomb, "Kinkan-tsuka," or the Gold Crown Tomb at Keishu and its Treasures. By KOSAKU HAMADA and SUEJI UMEHARA. 8vo. 29 pp. English, 176 pp. Japanese. 44 plates. Atlas, 4to. 50 plates. (Government General of Chosen. 1924.)

We must again welcome the excellent work produced by Professor Hamada and his school of the Archaeological Institute. One of the great tumuli of the Korean kings was partly dug away in enlarging the town of Keishu, and the contents were being removed. The Japanese scholars were summoned, excavated the site, and recovered most of the scattered objects. These were placed in the Central Museum at Seoul; but at the earnest wishes of the townspeople they are now in the local museum near the site. This is the richest tomb known in Korea or Japan; more than five hundred objects were found. Two glass cups give a suggestion of late Roman date, though hardly of European work. The barrel pottery, with rounded ends and a neck in the middle, is also a late Roman fashion. Other glass work from the Japanese Imperial Repository is figured, and a hemispherical bowl with concave facetting looks more like early Roman work. How much valued glass was is seen by a large ovate pendant of violet glass being suspended in a network of gold wire, to dangle by a loop-in-loop gold chain from the gold girdle. There is some Indian ornament, as pls. xv, 2; xxi, xxii, and Graeco-Indian in xxvi; while the girdle work of pierced plates is more like Central Asian. The detail is, however, outside of our scope here, but we must thank Professor Hamada for such fine results, and for his English translations which explain them to Europe.

Annals of Archaeology, Vol. XI, Pt. 4. Liverpool. 1924.

This number is almost entirely occupied with a valuable account of the Meroitic objects found by Professor Griffith in 1910-12. This provides a full *corpus* of pottery outlines, and a large number of excellent photographic plates of pottery, bronze, and other objects. The dates of all these are assigned to four periods, from late Ptolemaic to Justinian. Our gratitude for such a mass of good illustration is a little damped by the inattention to scales. It is difficult to realise things which are of all kinds of scales from one-half to one-sixth on a single plate, and only to be discovered from the text measures. The pottery *corpus* has no scale at all, except to three mixed plates. The grave plans have no scale either. Every plate should have the scale stated with the title, and much should be strained to keep to a uniform scale. The principles of book making are hardly known in Egyptology.

It is remarkable what a variety of debris were mixed in Nubian styles. The pottery is copied from Roman, Ptolemaic, Persian, XVIIIth dynasty, IInd dynasty, old African forms, and some which seem to show the primeval Badarian, all thrust up into Ethiopia by the pressure of successive invasions, such as the Persians made Nektanebo flee with his valuables. The Barbotine ware was probably imported, as much of it shows still the origin in copying embossed silver cups; no date is stated for it. A fuller text, and discussion of the periods and origins of the strange Nubian decoration, would have been welcomed from the author. No one else can supply the needful detail of the relative dates and connections.

JOURNALS.

Annales du Service. XXII.

EDGAR, C. C.—*Hieroglyphic inscriptions from Naukratis.* It is here concluded that the Great Temenos enclosed a Ptolemaic temple, from which came part of an obelisk of red granite, and several blocks of basalt with procession of nomes. The "Damanhur" copy of the Rosetta Stone was also found at Naukratis.

EDGAR, C. C.—*Tomb-stones from Tell el Yahoudieh.* Though many new tomb-stones have Greek names they are probably all Jewish.

DARESSY, G.—*Casse-tête préhistorique en bois de Gébelein.* This flatted strip of wood, covered with incised designs, is obviously a wand of office like that carried by the steward at Amarna, and of the same size, being 29.1 inches long (see PETRIE, *Amarna*, V). This length is 40 digits, the basis of the land measure, which is thus taken back to the prehistoric age. The designs include a vulture eating a dead body, many figures of dogs running, a tree modified from the palm, three men in a boat, a boar, and an ostrich. Gebelein was plundered by the museum men in 1885, without detailed record, but the pottery found varies from white cross-lined down to decorated, s.d. 33-63, or later. The figure of a boar suggests to M. Daressy that it was the emblem of the god Nubti (unknown to Lanzone), and Set-nubt has Ant (the column) added to his name; hence the An names of Denderah, Hermonthis and Esneh, pointing to the Anu people occupying the south, adjacent to the Anu of Nubia, and the Anu of Libya. They are also found in the north at An Heliopolis and Diospolis of the XVIIth Delta nome, and out in Sinai as the Anu Menti. Osiris as the pillar god is also brought into this connection. How much of all this can be adjusted to the events otherwise known remains to be seen.

LEFEBVRE, G.—*Textes du tombeau de Petosiris.* These refer vaguely to his good works in building and repair of the temple of Tehuti, but do not add to the interesting ethical view in the previous inscriptions.

MUNIER, H.—*Résultats épigraphiques des fouilles d'al Qurtah bil Dûetr.* This site is near Kom Ishqau. A stele is for Paisis, son of Dizapolis, a Thracian. This recalls the will of a daughter of Dizoulos, a Thracian. Another is for Dôros, son of Demoplôn of Chios; these point to a military settlement. Coptic steles have the names of Pantaleon, Leontios, Zacharias and Kollouthos. These seem also to be more Greek and Jewish than Egyptian.

PILLET, M.—*Fouilles de l'angle nord-ouest de l'enceinte du grand temple d'Amon à Karnak.* Bricks of XXIst dynasty (Men-kheper-ra) and blocks of Usarken I were found.

PILLET, M.—*Rapport sur les travaux de Karnak (hiver 1921).* Various repairs noted. A block of Amenhetep III was, with others of the same age, in the foundations of the temple of Khonsu.

BARSANTI, C.—*Restaurations exécutées à Saqqarah en 1920.* Records of roofing and repair.

SOTTAS, H.—*Inscription démotique de la règle graduée de Dendérah*. The final reading is "Dedicated to Hathor of Dendereh the great goddess by the strategos Panas, son of Psenobastis, and by Peteharsamtheus, son of Panas, to proportion the building."

DARESSY, G.—*Un ostrakon de Biban el Molouk*. This was of the chief of the works, and accountant of the animals, Syrians, Kushites, and horsemen, for the tomb of the king, named Hay, and his son Amen-nekht.

DARESSY, G.—*Une stèle de Mit Yaich*. This site is near Moqdam. The stele is of Usarken II presenting lands to the gods.

EDGAR, C. C.—*A note on two Greek epigrams*. A scribble in the tomb of Petosiris adds up the numerical value of letters in a vase. The god Herôs was Thracian, introduced in Egypt by soldiers, and there called Herôn.

GAUTHIER, H.—*Un notable de Sais, Ouah-ab-re*. Seven statues and a sarcophagus of this person have been found (now in Cairo), and a statue in the British Museum, also another in England (formerly in Crystal Palace, Sharpe 65), and one in the Louvre, A 91. Twenty-seven titles of this man are here listed. Long notes to the titles do not add materially to their explanation.

GIRON, N.—*Nouvelle dédicace démotique*. Ptolemy the strategos, son of Panas, records works done in the temple of Hathor of Dendereh.

ENGELBACH, R.—*Steles and tables of offerings . . . from Tell Edfu*. This gives several texts and a list of over 170 names of the Middle Kingdom at Edfu. *The God Asa of Edfu*. The names Asa-onkh and Asa-neter point to a name of a God.

LEFEBVRE, G.—*Textes du tombeau de Petosiris*. One of them describes the wife of Petosiris, who was "profitable of speech, agreeable in her discourse, of good counsel in her writings, all that passed her lips is like the works of Măat—a perfect woman, greatly praised in her city, giving the hand to all, saying that which is good, repeating what one loves, giving pleasure to all, nothing evil passed her lips, most beloved by all, Renpet-nefert, daughter of the high priest Pef-nef-neit and the lady Ast-urt."

Another text refers to the son, Zedher. "What ground thou hast for rejoicing for all welfare, since thou goest on the water of thy master Tehuti. [This phrase "on the water," *her mu*, may rather mean "in the water," the water of the "font of mind," the "ocean of knowledge."] Thy being is exalted by that. These are the waters that give life, happy is the man whose heart leads to them. Blessed of God is he who gives himself to follow the way, and such is the ground on which thou reliest. There is not a way to be compared with it, it strengthens the being, increases the years, enriches the man who was poor. God enlarges thee above thy fellows, when thou goest by his waters, and he occupies thy soul. He has made thee to be praised in the heart of the powerful, and to be loved in the heart of the humble."

After a description of the works done for the temple, there follows this psalm. "The eldest son of his eldest son, the high priest Petukeru, says: It is good to go in the way of God, great are the benefits kept for those who give themselves to follow it. This is a memorial which a man makes to himself in the land, when he cleaves to the way of God. He who holds to the way of God, his life is all passed with joy, full of riches above his fellows: he grows old in the city, he is worthy in his nome, all his members remain young like a child, his children multiply before him and are as chiefs of their towns; his posterity continue

generation to generation, and he shines like the rising sun ; his fear is in the hearts of men, and his love in the hearts of women ; he reaches the tomb with a heart that is sweet, in fine embalming of the works of Anubis, and the children of his children dwell in his place. They say of him in his town, when he has left life, ' This was a follower of the leader of Amentet, no reproach from God was upon him. Thou hast gone on the way of thy Lord, Tehuti ; and when His blessings are ended on earth, He grants thee like favour after death.' " Another long text praises the various works done for the temple.

DARESSY, G.—*Sur trois haches en mineral de fer*. These haematite axes were obtained by Gordon from the Niam-niam, who call them " stone fallen from heaven," i.e., meteoric iron. As they are ordinary haematite, with some alumina, but no nickel, it seems that this name is like the *baā-ne-pet* of the Egyptians. Other axes of silicate of iron, made by the adjoining Monbottus, are likewise said to fall from heaven. These names prove that meteoric iron was known, and minerals like it were confused with it ; probably the prehistoric iron beads, and the Old and Middle Kingdom rare tools of iron, were all of meteoric origin.

DARESSY, G.—*Statue of Ment-m-hat*. This bears an unusual hymn. " The prince, ruler of the City of the South, Ment-m-hat, son of Nes-ptah, says, ' I rejoice in the protection of the barque of the truths, of the God from whose face the foreigners flee. Egypt shines in joy when Horus returns to his palace, a bird spreading his wings and clearing the gates of . . . Lord of eternity, with eternity in his hand, everlastingness in his grasp, establishing life, ample among the people and with the gods. He ordains life and he makes young again the divine elders. When Ra rests him in his horizon, he rules the destiny of the gods, he rules the destiny of men, he rules the destiny of spirits ; and he makes the thoughts of the gods, he makes the thoughts of mankind, he makes the thoughts of the glorified, and the gods fulfil his plans, and men act as he leads them, and the animals do his purposes. When he has passed the gates of the two lands, or when he goes through the plains of heaven ; hidden, mysterious, or shining in heaven ; he is Khepra, who gives direction to every element (?) . . . luminous to see, he is the air which enters the body, which one inhales as the breath of the mouth . . . ' "

DARESSY, G.—*Bérénice et el Abraq*. The plan of the temple at Berenice made by Col. Purdy in 1873 is here published. A squeeze of the inscription indicates Domitian or Trajan. Details are quoted of the journey southward by Purdy and Colston, reaching a fort at el Abraq, of which region there is a sketch plan.

DARESSY, G.—*Les emplacements de la ville de Taoua*. From geographies and place lists the conclusion is that Taoua was at Tanta, and that the Copts displaced by persecution went west and left the name at Tawah, a small site three miles distant.

DARESSY, G.—*Fragments d'un livre de l'ouverture de la bouche*. These contain a few variants.

GAUTHIER, H.—*A travers la Basse-Égypte*. Sais was ransacked for stone to build the mosque of El-Ghamri in Cairo. Altogether there have been recovered three black basalt columns of Apries. A sarcophagus of grey granite, for Horkhebt, stands exposed at Sais, quoted by Lieblein (Dict.). At Memphis, north-west of the Colossus, a stone of Amenemapt (XXIst dynasty) bears the figure of Sekhmet.

On the edge of the plateau east of Khufu's pyramid are tombs of Khufu-mery and Khnumzedef. An ushabti of Hakar (XXIXth dynasty) has come to the Museum, probably from Saqqarah.

EDGAR, C. C.—*Selected papyri . . . of Zenon*. Nearly all concerned with accounts, with a few sidelights. A list of places in Palestine scarcely seems in local order.

KUENTZ, C.—*Rapport sur une tranchée fait par M. Baraize au temple de Louxor*. The north half of the outside of the east wall was searched, finding battle scenes, but no long inscriptions.

PILLET, M.—*Rapport sur les travaux de Karnak* (1921-2). The Great Hall is flooded from about 10 October to 16 November. Twenty-eight more blocks of alabaster of the shrine of Amenhetep I have been removed from the foundation of pylon III; they are of the finest work. Between the pylons VII and VIII was found a black granite shrine of Senusert I. At the base of pylon VII were found the burnt remains of the great masts, with plating and nails of bronze. The fire had decomposed the bases of the colossi and destroyed the lists of conquered lands. The eastern obelisk has the lower part left in position. It was much larger than that of Hatshepsut, being 124 inches instead of 96 inches wide; that of Tahutmes I is only 83 inches. The height of these latter is 1,160 and 770 inches; as these heights are 12.1 and 9.3 diameters respectively, it is not clear what height is implied by 124 inches width. On this see *ANCIENT EGYPT*, 1923, p. 60. From pylon IX, 260 blocks of Akhenaten's temple have been extracted, with the colouring in perfect condition.

DARESSY, G.—*Description des monuments épigraphiques, trouvés à Karnak en 1921-2*. Statue of Nenti-oaor-usur, son of Amen-kesdennu and Tesmut-peru, steward of Shepenapt. Head of a queen of XXVth dynasty. Headless crouched figure of Senmut with Nefru-ra. Statue of Nesmin, with the unusual term, *maa kheru ne nut ef zet ta*. Part of stele of Horus on crocodiles for Zed-khonsu-auf-onkh.

ENGELBACH, R.—*Ostraka in Sahidic dialect of Coptic*. A man abandons his pledge of an iron hammer. Other letters are on usual business.

GIRON, N.—*Titulus funéraire Juif d'Égypte*. This is a very rough little stone with three seven-branched lamp-stands and the name Haddan: probably early IIInd century.

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GAUTHIER, H., ET LEFEBVRE, G.—*Sarcophages du Moyen Empire, provenant de la nécropole d'Assiout*. A large number of inscribed sarcophagi have been scattered without publication; here the texts are published of those still in Egyptian museums. The names are Atefab, Adu, Onkh, Onkhef, Upay (3), Upuatu-emhat (3), Upuatu-hetep, Emsehta, Nekhta, Hegā, Khety, Seher, Tetadu, Thāua, Themti.

SOTTAS, H.—*Quelques papyrus démotiques provenant d'Assiout*. These are business documents under Amasis and Cambyes, fully analysed.

DARESSY, G.—*La crue du Nil de l'an XXIX d'Amasis*. This inundation covered all the plain and damaged the great dykes of Memphis.

DARESSY, G.—*La pierre bilingue de Menouf*. This stele was reported in 1820, but cannot now be found.

MUNIER, H.—*Stèles Coptes du Fayoum*. Four are here reported.

PILLET, M.—*Note sur une mosaïque trouvée à Athribis*.—The pattern has the duplex knot with curved *swastika* arms, also crossing squares and circles; both are purely Roman patterns usual in the north.

LEFEBVRE, G.—*L'œuf divin d'Hermopolis*. The park of the temple was a holy site where Ra was born, and where "the half of the egg was buried."



GAUTHIER, H.—*A travers la Basse-Égypte*. A block from Behbit is now at Tanta. Tanta is on a *kom*, and in that a block of Amasis has been seen. Probably also from there is a lintel of Amasis at Mehallet Marhoum.

EDGAR, C. C.—*Selected papyri . . . of Zenon*. One states the import dues, which were $\frac{1}{2}$ on oil; $\frac{1}{3}$ on dried figs and wine; $\frac{1}{4}$ on honey, cheese, pickled meat, medicine, nuts, pomegranate seeds and sponges; and $\frac{1}{5}$ on wool. Beside this there was a port tax of $\frac{1}{2}$ to 1 per cent., and a *likin*, or inland toll, of 4 per cent. Slaves that were bought in Edom ran back to the dealers, who then demanded 100 drachmae before returning them.

PILLET, M.—*Rapport sur les travaux de Karnak* (1922-3). Curves are given of the Nile rise at Thebes, and the infiltration in the temple. The rise in the temple comes to its height a month later than the Nile, and is two or five feet lower. As it only rises two or three feet over the floor, the damming-out keeps more than half the depth of water out of the temple. The sculptured blocks of Akhenaten were taken by Heremheb for the filling of his pylon; the plainer blocks were next taken for the foundations of the Great Hall. Seventeen more blocks of the alabaster shrine of Amenhetep I have been found, and nine blocks of quartzite sandstone and black granite of the funerary chapel of Hatshepsut built by Senmut, by order of Tehutmes III. This throws a new light on the family troubles, and shows they cannot have been very serious at this time. Not only was this chapel built, but there are no erasures. This long report describes work of repair and rebuilding all over Karnak. The drying of the whole site permanently, by baring a long slope of earth around it, so that evaporation would remove water quicker than it could percolate, should be studied, as such a method would certainly succeed, and prevent further rise of salts into the stones. In such a clearance probably many more monuments would be found.

AIMÉ-GIRON, N.—*Graffiti grecs découverts à Karnak*. Scurrilous scribbles on a wall.

PILLET, M.—*Naos de Senouset I^{er}*. This is of polished black granite, 50·8 inches high inside, 68·6 over all. Thus it was for a small statue, probably of Amen, as scenes of adoration to him are engraved on the outside. The figures and names of Amen have been erased, and then re-engraved, so this was exposed in the time of Akhenaten and Sety I.

GAUTHIER, H., ET LEFEBVRE, G.—*Note sur le mot* . This is equal to *ma qednef*, "in its totality," "entire"; and , *gs tut*, is "the complete half."

ENGELBACH, R.—*Monument of Senusret Ist from Armant*. Two figures of a triad of the king between goddesses; as this is called a *pepet* of granite this appears to be the name for a triad. May not this be a derivation in common speech from *pet pet*, "to trample under foot," taken from the treading on the nine bows as here represented?

ENGELBACH, R.—*Small obelisk of Amenhetep II from Aswan*. This is the upper part, 43 inches long, probably about half of a pink granite obelisk. Only one piece is inscribed.

GAUTHIER, H.—*A travers la Basse-Égypte*. In the midst of Kafr Matbul, near Sakkha in the north Delta, are two colossi of pink granite of Merneptah, 9 feet high, with Ra and Atmu, respectively, at his side. At the north of Bubastis two limestone door-jambs of Ramessu III have been found. At Nub Taha, near Shibin el Qanatir, there were found a much-damaged copy of the Rosetta decree, and the upper part of a red granite shrine of Psamtek I. At Ushim (Letopolis) are fragments of construction of Nekht-nebef. At Daqmireh, north-east of Sakkha, is a torso in black stone of an official of Nekht-nebef. At Moqdam is the top of a stele, undated. At Ismailieh are halves of a pyramidion of quartzite, now rejoined; the text is here copied (with very illegible photographs), and for translation the reference is to Prof. Griffith's copy (*Nebesheh*, p. 104).

ENGELBACH, R.—*Two steles of late Middle Kingdom from Edfu*. These are of Rames, son of a king's son Hor-her-khuf and Aset, whose wife was Nefert-ubenes; the other of Horemkhof, son of Hora, his wife Sebek-neferu, his sons Senbef, Neferhetep and Neterast, and his daughter Nefert-uben.

EDGAR, C. C.—*Selected papyri of Zenon*. Eleven more letters, which will help to reconstruct the Ptolemaic life when the time comes to build up a connected view of the correspondence.

MUNIER, H.—*Mélanges de littérature Copte*. Biblical fragments and martyrology of Cosmas and Damianos from Aswan; miracles of the same saints by invocation; lengths of shadow at hours of the day in six months, tables which seem to have been drawn up on a rough theory, as the noon shadows were between 2 and 5 feet, whereas at no latitude can the winter shadow be less than six times the summer shadow, outside of the tropics. The epoch conforms to the Actian calendar.

LEFEBVRE, G.—*Un couvercle de sarcophage de Tounah*. This belonged to a lady Tadapakem, daughter of Pekhred-äht and Nes-nehemt-ouäit. Perhaps through the last this family was connected with Petosiris. Inscription given in full.

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LEFEBVRE, G.—*Inscriptions Gréco-Juives*. The names are of Delphynios, Dôsithiôn, Sabbataios, Pyreiôn, Kleônos and Mysos: all from Yehudiyeh.

GAUTHIER, H.—*Corrections à ma publication du temple d'Amada*.

THOMAS, E. S.—*Fragment of a stone vessel from an ancient mining site*. This is in a talcose serpentine, still commonly used for cooking-pots; it has a ribbed pattern.

LUCAS, A.—*Temperature and humidity of several tombs of the kings*. These are of little import, as they were all taken in open tombs on winter mornings.

LUCAS, A.—*Cleaning of certain objects in Cairo Museum*. On gold, carbonate and sulphate of lime, removed by dilute hydrochloric acid. On gold plating, chloride of silver, removed by strong ammonia. Gold shells with specks of white metal insoluble in acids [probably these are osmiridium, several examples of which are known]. Dagger-blade, gold plating on silver, chloride removed by ammonia.

EDGAR, C. C.—*Selected papyri of Zenon*. The amount of planting in the Fayum from the gardens at Memphis and Alexandria is surprising. Entries appear of 10,000 vine plants, 1,700 vine shoots, 500 pomegranate shoots, 3,000 olive shoots, also of pear shoots and sweet-apple trees. Honey was so important

for food, and wax for shipping, that bee-keeping extended to carrying hives about on donkeys in order to place the bees in the midst of the suitable crops. The wax cost only 26 drachmae per talent, or under 2½d. per lb. ; this would be about the same in wage values as wax now costs in England.

PILLET, M.—*Rapport sur les travaux de Karnak* (1923-4). The Sety reliefs on the outside of the Great Hall are "devoured little by little," owing to the crystallising out of the salt. It is sad that the simple remedy of a wet-sand plaster is not used to remove the salt. Under the pylon of Amenhetep III much more has been recovered of the earlier monuments, 32 blocks of alabaster, including a roofing slab of 90 tons, and 54 blocks of the Hatshepsut chapel. The alabaster work is of Amenhetep I, II, and Tehutmes IV. Of the Hatshepsut blocks eight now found have had the figure and name erased. A new granite pedestal of Amenemhat III and IV was found under the pylon. A life-size statue of Sety II, headless, kneeling with a table of offerings, of quartzite, was found outside the south wall of the great temple. Several picks of dolerite have been found, along with chips, in the filling of pylon VII. A small granite obelisk of Ramessu III was found between pylons IX and X ; the lower end is lost. On the quay wall outside the north gate of the temple of Mentu there is a new cartouche of Psamtek I, "beloved of Amen Ra, lord of Karnak."

LEFEBVRE, G.—*Bas-relief du dieu Hḥw*. This obscure god, from whom the city of Heroopolis was named (Pithom, Tell Maskhutah), is found represented as a horseman, feeding a serpent from a patera.

HAKIM ABOU-SEIF.—*Two granite sarcophagi from Samannūd*. These were found in the middle of the town, in the corner of a cemetery : only one lid remained, and probably both had been moved. They had belonged to two prophets of Anhur, Sheb-min and Onkh-her, father and son. Sheb-min's mother, Onkhet, and wife, Am-pet, are named. Onkh-her's sarcophagus was far from finished, and all the stages of carving in granite are seen.

WAINWRIGHT, G. A.—*Coptic reading desks from the Fayum*. Three of these are described, two low, and one higher with a cupboard below, 9 inches high. One is carved above and inlaid with ivory in dark wood ; it formerly had a cupboard beneath it.

WAINWRIGHT, G. A.—*Basketry, cordage, etc., from the Fayum*. A flat and a large round basket ; a basket-work mat and rope for climbing palms ; wooden hooks with cords, tied in pairs, probably for shaduf attachments.

WAINWRIGHT, G. A.—*Household objects from Kom Washim*. Three large red plates of IVth century ; a bronze frying-pan ; a wooden stamp with the name **NEYXHC** and a hand ; such were evolved from the custom of marking a heap of flour with the impression of a hand to ensure that none was removed ; two little toilet-boxes with sliding lids to the partitions.

FIRTH, C. M.—*Two mastaba chapels of the IIIrd dynasty at Sakkara*. The plan of these is like the pyramid chapel at Meydum, an entrance turning to the right hand in a chamber, out of which the exit is at the other end of the back, to the offering place. The attached columns of the façade are fluted, and columns at the side of the Court are papyriform, triangular, with usual capitals. The burial was plundered, but pieces of "blue-grey stone" (? volcanic ash) vases had *nesut bati nub nefer*, and palace or tomb name Ment-onkh (perhaps short for *menaut*), "the haven of life," according to the Egyptian imagery of life as a voyage. The name *nub nefer* is unknown for a king ; so it looks as if the vase

were for "the king's excellent gold (burial chamber) in the tomb called the haven of life." These chapels have been figured in the illustrated papers, and they show the start of an entirely new style of architecture.

MEUNIER, H.—*Une scène de la Nativité*. This shows the Child in a bath between the nurses Zelomi and Salome, according to an apocryphal gospel.

LEFEBVRE, G.—*Statuette du grand prêtre Romè-roÿ*. These two names belong to the same person. The formula is the same as that of the high priest Amenhetep, "I was a man with both hands on the steering oar acting as a pilot in life." It seems a forced interpretation to apply this to the future life; it rather refers to piloting the religious life of the nation. Sâamen, who has been taken to be a high priest, was only the first prophet of the Ennead; his sons were Neb-pehti-ra and Sâamen Mersu. A revised reading is given of the 1924 stele of Amenhetep II.

HAKIM ABU-SEIF.—*Report of the Inspectorate of Tanta*. This inspector is diligently securing the Government rights over the tells, which were continually encroached on by the people. Tombs were found at Tell Abu Billu containing late scarabs; from the same place also a Greek statue in a naos. From Sakha comes a large group of coins. From Desuq come many bronzes (see below).

COLE, J. H.—*Recent Survey of the Theban Necropolis*. A contoured map of the necropolis, marking 332 private tombs and the temples, has been published in fifteen sheets on scale 1:1,000, at 10 P.T. a sheet. Contours of every two metres are entered. The temple plans from previous publications do not quite accord with the sources, however.

ENGELBACH, R.—*Saite Tomb discovered at Beni Hasan*. Plundered, but contained common amulets.

ENGELBACH, R.—*Notes on the fish of Mendes*. From the fins this is concluded to be the *shilba*; yet it is hard to suppose that the fish with drooping hinder end can be so derived.

ENGELBACH, R.—*Seizure of bronzes from Buto*. A base of a statuette is dedicated to Uazet by Psemthek-men-Pe, son of Herkhebi and Hernefer. A bronze hawk on a base is for Amenardas, daughter of Peda-asar-un-nefer.

ENGELBACH, R.—*The Treasure of Athribis*. A jar of a hundredweight of scrap silver and amulets was found, mostly worn and imperfect, collected for melting down, about XXVIth-XXXth dynasties. Only about three pounds of amulets were good enough to clean. There are many of the Mendes fish, and of the *benni*. The *repa* Bak-en-nou is named on a pectoral.

LUCAS, A.—*Methods used in cleaning ancient bronze and silver*. Bronze was boiled with washing soda, and then cleaned with Rochelle salt (tartarate of soda and potash). Silver was washed with acetic acid to remove lime, and cleaned with strong ammonia and cyanide of potassium.

PILLET, M.—*Le Verrou*. The large bolt for fastening single doors was called *heken*, and is best known by the great bronze lion bolt of Apries. Another such has been found at Memphis, and there is a third with only a lion's head on the end. Two of wood are from the Fayum; there is also one of stone with a wooden shoeing to avoid friction.

GAUTHIER, H.—*A propos de certains monuments*. On a pedestal at Karnak are *nebti* and *her nub* names of Amenemhat IV. On a piece of an obelisk are new names of Ramessu III.

GAUTHIER, H.—*La titulature des reines des dynasties Memphites*. Copper cups of Queen Aput, mother of Pepy I, have the title "beholding Horus and Set." The phrases *hest urt*, *amt urt*, *mert f*, are treated as titles of queens, although the last is often found also used for commoners, and they do not imply any office. It is safer to avoid mixing honorific phrases with definite titles, and hence such are omitted in the lists of titles issued in this Journal. Also it should be noted that the earliest example of each title is quoted in these lists, and it would be impossible to make the lists a complete corpus of every instance of each title. Other examples of "seeing Horus and Set" are quoted, of nine queens. The only correction to the list of queens' titles, which falls within the limits followed in this Journal, is that No. 32 (ANCIENT EGYPT, 1924, p. 112) may be quoted from the IVth instead of the VIth dynasty.

NOTE ON THE SAFETY OF KARNAK.

THE frequent lament about the inevitable destruction of Karnak by the inundation flood seems strange, when the example of entirely dry areas far below the inundation can be seen commonly in Egypt. At Naukratis, of which I have levels, the area excavated by the natives and always dry was 12 feet under the canal at the side of it and the inundated fields, and I dug deeper to 20 feet without reaching water. The needful condition for such drying is a sufficiently wide drying area, sloping down to the low level. This allows all infiltrating water to evaporate quicker than it passes through the earth, and thus it never flows on the surface.

The practical course at Karnak would be first to clear a trial area at the side of the temple with a slope all round of about 1 in 10, and then increase the slope gradually at high Nile until water just began to accumulate. This would show what slope was needful in that soil. The excavated earth should be banked up at the same slope around the area to keep out the inundation. On knowing the steepest slope which is effective for drying, such an area should be cut all round Karnak, using the earth (well rammed) for a great circuit bank.

As the high Nile is about $1\frac{1}{4}$ metres over the floor of the Great Hall, and a water-table of $\frac{3}{4}$ met. under the floor is desirable to prevent salt from rising, so 2 met. depth of drying is needed; at a slope of, say, 1 in 8, this means a slope of 16 met. wide, or 8 sq. met. section of trench. The perimeter of the ruins is 3 km., so there would be 8,000 cub. met. of earth to move, at a cost of under £100. How far the water-table would tend to rise in the middle is difficult to anticipate. It seems impossible that water should rise above a dry area which cuts off the supply around it; but if some lowering of the whole ground were needed that would be only part of the archaeological clearance which is required.

In any case, so soon as the buildings were cleared they would be permanently dry. It would then be time to establish drains into the drying area and, at low Nile, wash down the walls to remove the accumulated salt, and so place the buildings in a really safe condition. Another very effective way of removing salt is by damping and putting a damp sand plaster over the face of the stone, about an inch thick. All the salt then moves out with the evaporating water and accumulates on the surface of the sand, which can be broken away when dry and removed. This prevents the salt crystallising in the pores of the stone and disintegrating it.

NOTES AND NEWS.

THE retirement of Viscount Allenby from the High Commissionership in Egypt has been followed by the appointment of the Rt. Hon. Sir George Lloyd, G.C.I.E., G.C.S.I., now Baron Lloyd of Dolobran. His Excellency has most cordially consented to be a Patron of the British School in Egypt.

The British School will have three expeditions out in the East this winter. Miss Caton-Thompson will resume her search in the Fayum basin, assisted by Miss Gardner as a geologist, and, for part of the season, Mr. Carline of the Halifax Museum will also join the work. A band of fifteen of the best-trained workmen will be directed in the clearing of some of the Badarian village settlements, in order to trace the sequence of deposits, as was so successfully done at Badari. Two motor-cars will be required to bring water daily for the party. The lowest levels of the flint-work on the Fayum desert will be sought out and surveyed. It is hoped thus to recover more of the history of the earliest known civilisation.

The oldest remains of man, found in the Nile gravels, will be further searched for by Mr. Sandford of the Geological Museum, Oxford. His expedition will be over the deserts between the Nile and the Red Sea mountains. The evidence, so far, is that man of modern type is older than the various examples yet known of lower types, and it is most important to settle the various questions involved.

In the Persian Gulf Mr. Mackay is excavating the tumuli of the Bahrein islands for the British School, in order to discover their age, and to see if that site may have been a resting-place in the migration of the dynastic race to Egypt.

The Egypt Exploration Society will resume the work, suspended eleven years ago, at the great subterranean structure in Abydos; this will be in charge of Mr. Frankfort.

Mr. Carter is resuming the clearance of his great discovery, which will occupy at least two or three years longer for the removal of all the objects of Tutankhamen into safety.

The New York expedition at Thebes will be assisting Mr. Carter, and also engaged in preparing results of previous work on the palace of Amenhetep III for publication.

For the Harvard expedition, Dr. Reisner has engaged Lieut. Wheeler and Mr. Greenlees, in view of the management of the royal tomb which was found at Gizeh. The treatment of the objects, and the awkward access, make this a far more difficult task than the tomb of Tutankhamen.

Further work on great clearances for new discoveries is checked by the illegal claims of the Department of Antiquities.



